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THESIS

**ANATOMY OF A HOSTAGE RESCUE: WHAT MAKES HOSTAGE
RESCUE OPERATIONS SUCCESSFUL?**

by

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September 2004

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RESCUE OPERATIONS SUCCESSFUL?**

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ABSTRACT

This thesis develops a theory to determine the best execution time to conduct a hostage rescue attempt. It does so by explaining the phenomenon of a hostage crisis *biorhythm* and proposing four principles essential for success. The principles of hostage rescue operations presented in this thesis and used in the biorhythm model—*surprise*, *intelligence*, *operator's skill*, and *deception*—are derived from looking at numerous planning models from special operations, from personal experience, and the thorough analysis of six historical cases. The historical cases show that in every instance any one of these four principles was overlooked, the operation was doomed. These principles have been determined to be the most critical factors that change as the crisis develops throughout the hostage ordeal. A thorough understanding of this biorhythm will provide planning guidelines to assess the best windows of opportunity for a proposed rescue attempt.

One main focus of this work will be an in-depth case study of the hostage rescue operation “CHAVIN DE HUANTAR”. This case study will present compelling evidence to reinforce my hypothesis, and serves as a template model for successful rescue operations. The analysis of this single case will provide a wealth of information on the success of this remarkable operation. Another main focus of this thesis will be strategic thinking of a hostage crisis using game theory analysis.

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I. INTRODUCTION

We sleep safe in our beds because rough men stand ready in the night to visit violence on those who would do us harm—George Orwell

At any given day there are approximately ten to twelve American citizens (AMCITS) held hostage somewhere around the world¹. Some of these hostages have dual citizenship; others have retired from a lifetime of government service. I have personally been involved with tracking some of these AMCITS and trying to recover them. I have seen the intelligence and data concerning their precise locations and have been ready to go and rescue them. On every instance policymakers turned down the rescue option.

Ever since the ill-fated rescue attempt in Iran, the United States has been reluctant to commit military forces for hostage rescue operations. This reluctance is attributed in part to a risk adverse senior military leadership, stemming from disasters at DESERT ONE in 1980 and at Mogadishu in 1993, and to the uncertainty levels in a hostage crisis² environment that result during a hostage ordeal. National-level interest in this area has been limited, resulting in pusillanimous policy made by U.S. Government officials to deal with hostage incidents worldwide. If U.S. military forces and their policy makers are going to be successful in the conduct of these high-risk operations, a clear and concise U.S. policy must be developed with a thorough understanding of the principles for hostage rescue operations and their metamorphosis throughout the hostage crisis biorhythm.

This thesis develops a model for hostage rescue operations, by defining the four principles required for their success and explaining the phenomenon of a hostage crisis *biorhythm* using personal experiences, case studies, and mathematical models. A thorough understanding of this biorhythm will provide planning guidelines to assess the

¹ Information gathered from conversations with Peter Gustaitis, Colonel, U.S. Army Special Forces, retired; former Deputy for Special Operations, Joint Staff.

² A *crisis* is defined as an incident or situation involving a threat to the U.S., its territories, citizens, military forces and possessions or vital interests that develops rapidly and creates a condition of such diplomatic, economic, political, or military importance that commitment of U.S. military forces and resources is contemplated to achieve national objectives (FM 100-25, 1999, Glossary-7)

best windows of opportunity for a proposed rescue attempt. Furthermore, this thesis will help the reader become a better strategist during the planning, preparation, and execution of a hostage rescue operation. It will provide a thorough understanding of what makes these operations work, how to solve them successfully, and how to predict possible outcomes at different stages of the operation applying the principles of game theory.

The thesis follows four methodological steps. First, I will define some critical operational and doctrinal terms for hostage rescue operations. From here, I will extract and provide the four principles for success during hostage rescue operations and establish definitions for what I consider the *biorhythm* phenomenon of a hostage crisis. I will also conduct a thorough description of all the phases of a military hostage rescue operation, reviewing current and proposed U.S. policy on hostage rescue operations. Second, I intend to use a single compelling case study (Operation CHAVIN DE HUANTAR) to illustrate the legitimacy of my hypothesis. This in-depth analysis will be structured following all phases of the rescue operation, outlining the critical factors that made the operation a total success and identifying the biorhythm of the operation. Third, I intend to describe the biorhythm of a hostage crisis using game theory principles, identifying the critical factors for a successful rescue attempt. These factors will be represented graphically to show that, throughout the course of a hostage crisis, they benefit the rescue force or the hostage takers differently, depending on the moment in time in the biorhythm. This model will present compelling evidence to reinforce my hypothesis and answer my research question. Fourth, I will introduce five more hostage rescue operations, and apply the biorhythm model to them to reinforce my hypothesis.

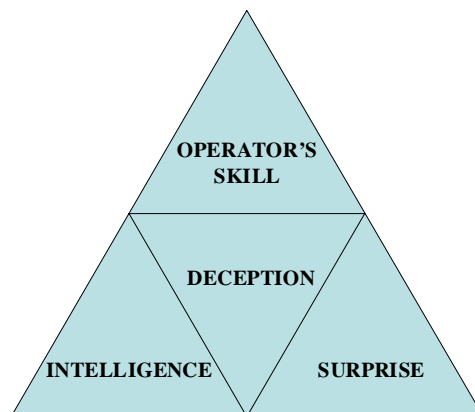


Figure 1. Author's Principles for Hostage Rescue Operations

The findings of this thesis will enable decision-makers to better plan and organize hostage rescue forces to act at the appropriate time (window of opportunity), maximizing their chances of success. Additionally, it will also enable decision-makers to comprehend the hostage crisis environment by providing a useful planning model that can be implemented effectively and accurately, presenting a clear picture of possible outcomes throughout a hostage crisis.

A. THE ISSUE OF TIMING

Timing refers to the effects achieved as well as to the application of force (Joint Pub. 3-0, 2001, p. III-15)

The question of *when* to send in a rescue force to resolve a hostage crisis is one that has troubled most military strategists and politicians throughout time. History has shown that, for the most part, the best moment for the execution of a hostage rescue attempt is later in the life of the crisis. Waiting to conduct an operation later allows for critical information and intelligence to surface, planning and preparation of the rescue force to be refined, and negotiations to try to achieve a peaceful resolution. Executing the operation later will also allow for the natural degradation of the will and readiness of the captors (Nordberg, 1999, p. 8). The biorhythm hypothesis states that there are different moments in time that present themselves throughout a hostage crisis, not just one. Furthermore, it also contends that at different points later in the crisis, the roles are turned, benefiting the hostage takers or the terrorists in different ways. The key is to plan for the most effective window of opportunity, and conduct the rescue maximizing the element of surprise, the intelligence gathered, and the operator's³ state of readiness.

Timing also requires being able to know the enemy's culmination point⁴. In hostage rescue operations, the terrorist's culminating point could be reached when he no longer has the logistical means to support his operation, when the hostages' health

³ Most references erroneously use the term operator to designate anyone that "pulls a trigger" in SOF. In a counterterrorist unit, the term *operator* is given to those members of the unit that have served and have experience in all operational areas of that organization: the assault force, the sniper-observer force, and the technical support element.

⁴ The culminating point is that point in time and space where the attacker's effective combat power no longer exceeds the defender's or the attacker's momentum is no longer sustainable, or both. Beyond the culminating point, attackers risk counterattack and catastrophic defeat and continue the offense at great peril. Defending forces reach their culminating point when they can no longer defend successfully or counterattack to restore the cohesion of the defense. The defensive culminating point marks that instant at which the defender must withdraw to preserve the force.

condition has become critical and medical assistance is required, or when the psychological and physical stresses of the siege overwhelm the captors. For the rescue force, the culminating point could be reached because of the psychological and physical stresses of a prolonged wait, a lack of intelligence, training or rehearsing excessively, or the loss of the element of surprise.

An operational commander might have the best-trained and equipped rescue force and all the necessary logistical supporting assets at his disposal, but if he does not understand and track the crisis biorhythm and cannot pinpoint the best execution time, the rescue will fail. By drawing out the negotiations process as long as possible, the terrorists will tire and the authorities will have the appropriate time to prepare a tactical response.

B. OPERATIONAL TERMS DEFINED

Each branch of the Armed Services (Army, Navy, Air Force, Marines) gives operational terms a different spin. There are several definitions for the operational terms used throughout this research, specifically those used for the proposed principles. To reduce the amount of redundancy and discrepancy between service definitions, the operational terms used in this thesis are, for the most part, definitions taken from the Joint Publication Series for Joint Doctrine, which establishes the overarching doctrine⁵ for all services.

This thesis focuses specifically on the military response to a hostage crisis against a barricaded enemy. It does not cover, but it is applicable to, other types of hostage situations such as those that fall under the responsibility of Department of State (DOS), Department of Justice (DOJ), the Department of Transportation (DOT), or other local law enforcement agencies⁶. Some of these examples include hostage situations in detention facilities, non-barricaded situations, lone criminals or suicidal individuals, and kidnappings.

⁵ Doctrine defines who we are and why we exist in the military; it sets capabilities and limitations, guides mission selection and assignment, and sets command and control arrangements. Doctrine is neither policy nor strategy; it is authoritative but not directive.

⁶ Depending on the location of the incident and type, one of these agencies will be responsible for the operation. DOS is the lead agency for incidents that take place outside the U.S., DOT is the lead agency for incidents aboard aircraft “in flight” within the special jurisdiction of the U.S. The Assistant to the President for National Security Affairs resolves any uncertainty on the designation of lead agency or responsibilities (Joint Pub 3-07, 1995, p. III-3).

1. Hostage Rescue

Joint Doctrine for Special Operations, Publication 3-05, defines hostage rescue operations as:

Recovery of hostages or sensitive material from terrorist organization [are] operations conducted to secure hostages and/or sensitive materiel from terrorist control, requiring speed, shock, surprise, and violent action. The safety of the hostages and preventing destruction of the sensitive material is an essential mission requirement (Joint Pub 3-05, 1999, p. II-8).

A hostage rescue is a special operations mission under the umbrella of combating terrorism⁷ (CBT). It is a specified mission for “...selected units within special operations that operate under the direct control of the National Command Authority (NCA) or under a combatant command arrangement” (FM 3-0, 2001, 9-12). Counterterrorism is also one of the nine special operations core tasks: *Direct Action* (DA), *Counterterrorism* (CT), *Foreign Internal Defense* (FID), *Unconventional Warfare* (UW), *Special Reconnaissance* (SR), *Psychological Operations* (PSYOP), *Civil Affairs Operations* (CAO), *Information Operations* (IO), and *Counterproliferation of Weapons of Mass Destruction* (CP). Special Operations Forces (SOF) are specifically organized to accomplish these nine tasks. The following diagram represents the full spectrum of military operations and shows where CT operations occur (hostage rescue operations are offensive measures and therefore a subset of CT).

⁷ Joint Pub 3-07.02, Joint Tactics, Techniques, and Procedures for Antiterrorism, defines Combating Terrorism as “...actions (including antiterrorism and counterterrorism) taken to oppose terrorism throughout the entire threat spectrum. Antiterrorism (AT) involves defensive measures used to reduce the vulnerability to terrorists acts, as opposed to counterterrorism (CT) which consists of offensive measures taken to prevent, deter, and respond to terrorism” (Joint Pub 3-07.02, 1998, p. vii).

RANGE OF MILITARY OPERATIONS			
Military Operations		General US Goal	Examples
COMBAT	War	Fight & Win	Large-scale Combat Operations: Attack / Defend / Blockades
	NONCOMBAT Military Operations Other Than War	Deter War & Resolve Conflict	Peace Enforcement / Noncombatant Evacuation Operations (NEO) Strikes / Raids / Show of Force Counterterrorism / Peacekeeping Counterinsurgency
		Promote Peace & Support US Civil Authorities	Antiterrorism / Disaster Relief Peacebuilding Nation Assistance Domestic Support Counterdrug / NEO

Figure 2. Range of Military Operations. (From Joint Pub 3-0, 2001, p. I-2).

The myriad of direct action or commando style missions within the CT umbrella are characterized by the fundamentals of *surprise*, *speed*, *violence of action*, *security*, *flexibility*, *accurate and selective fires*, and by *planning at the lowest levels*. In addition, they also encompass some of the elements of offensive operations such as *concentration* and *audacity* (FM 3-0, 2001, p. 7-3). Several models are available that provide planning templates for success during these high-risk offensive operations. In *Spec Ops*, William McRaven provides six principles for Special Operations Forces (SOF) to achieve relative superiority while conducting direct action operations: *speed*, *surprise*, *purpose*, *security*, *repetition*, and *simplicity*. Other models for these types of operations provide similar frameworks to achieve success, but as the McRaven model, they focus only on the tactical portion of the operation (once the assault begins), leaving little guidance for the

strategic and operational planning process⁸. Furthermore, none of these frameworks or models can accurately represent the intricacies of a hostage rescue operation.

The principles of hostage rescue operations presented in this thesis and used in the biorhythm model—*surprise, intelligence, operator’s skill, and deception*, are derived from looking at numerous planning models from special operations in direct action missions, from personal experience, and the thorough analysis of four historical cases. The historical cases show that in every instance any one of these four principles was overlooked, the operation was doomed. These principles have been determined to be the most critical factors that change as the crisis develops throughout the hostage ordeal.

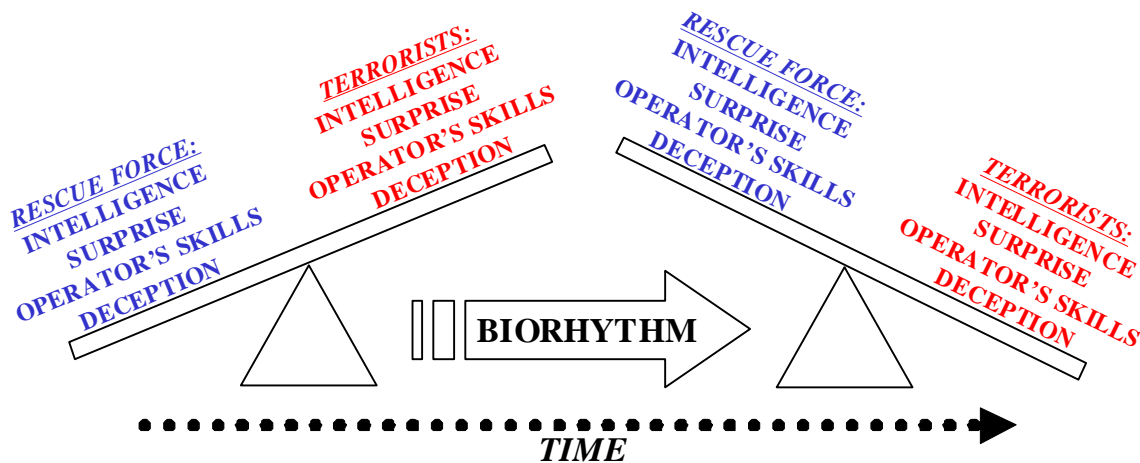


Figure 3. Author's Representation of the Effects of Time on Principles

The uniqueness of a hostage siege can be summarized via these four principles from operational warfare that transform throughout the life of the hostage ordeal. The principles of *surprise, intelligence, operator’s skill, and deception*, when represented on a simple graphical diagram, will follow a specific pattern in the shape of a human

⁸ Strategic Level of war as defined by Joint Pub 3-0, is that level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance and develops and uses national resources to accomplish these objectives. The Operational Level of war links the tactical employment of forces to strategic objectives. The focus at this level is on operational art—the use of military forces to achieve strategic goals through the design, organization, integration, and conduct of strategies, campaigns, major operations, and battles. The Tactical Level of war is the employment of units in combat. It includes the ordered arrangement and maneuver of units in relation to each other and /or to the adversary in order to use their full potential (Joint Pub 3-0, 2001, pp. II-2, II-3).

biorhythm. A close look at this graphical representation of the hostage crisis biorhythm⁹ will define the critical factors for a successful rescue attempt. These factors show that, throughout the course of the hostage crisis biorhythm, they will benefit the rescue force or the hostage takers differently, depending on the specific moment in time. A thorough understanding of this biorhythm will provide planning guidelines to assess the best windows of opportunity for a proposed rescue attempt.

On page #22, Figure 5 shows an example of the hostage crisis biorhythm model, demonstrating how the principles change as a function of time and depicting the best execution point for a rescue attempt. The graph is not an exact analytical tool that can predict precisely a moment in time; it is only an estimate to aid in the decision process. A more analytical approach later on in this thesis assigns values to different factors for all parties involved and plotting instances throughout a specified time line. This is done by applying utilities from decision-making models and principles of Game Theory¹⁰, but it is only a subjective estimate based on the planner's assigned utilities.

2. Kidnapping vs. Hostage Taking

Kidnapping is the surreptitious taking and holding of a person or persons for the purpose of achieving some personal or organizational gain (Bolz, Dudonis, & Schulz, 2002, p. 112).

A kidnapping differs from a hostage siege in several ways, to include the tactics, techniques, and procedures required to solve the crisis. First, in a kidnapping scenario, the main goal of the criminals is to gain a ransom; the hostage taker, on the other hand,

⁹ The *American Heritage College Dictionary* defines biorhythm as an innate, cyclical biological process or function. Also known as the "...biological rhythm, it is a cyclic pattern of changes in physiology or in activity of living organisms, often synchronized with daily, monthly, or yearly environmental changes. Rhythms that vary according to the time of day (circadian rhythms), in part a response to daylight or dark, include the opening and closing of flowers and the nighttime increase in activity of nocturnal animals. Circadian rhythms also include activities that occur often during a 24-hour period, such as blood pressure changes and urine production. Annual cycles, called cirannual rhythms, respond to changes in the relative length of periods of daylight and include such activities as migration and animal mating. Marine organisms are affected by tide cycles. Although the exact nature of the internal mechanism is not known, various external stimuli—including light, temperature, and gravity—influence the organism's internal clock; in the absence of external cues, the internal rhythms gradually drift out of phase with the environment... physiological rhythms are also present in the activity of individual organs, e.g., the beating of heart muscle and the activity of electrical waves of the brain." (<http://www.encyclopedia.com/html/b1/biorhyth.asp>, last accessed on 7 December 2003).

¹⁰ Game theory is the branch of social science that studies strategic decision-making (Dixit & Nalebuff, 1991, p. 2).

seeks power¹¹ in addition to and above all other demands, which usually include an exorbitant amount of money. Second, a hostage crisis usually occurs at a known location, with the terrorists already surrounded inside a structure; in a kidnapping, the security of the criminals rests solely on the clandestine¹² nature of their location. Except for the ransom or telephone call, no one has any idea who or where the perpetrators are located (p. 112). Third, a hostage crisis will usually last anywhere from one to two weeks, depending on the logistical or physical constraints of the terrorists. Kidnapping situations can go on for months or even years. Finally, hostage takers are historically more brutal in their treatment of hostages, torturing or killing them at random to establish political shock and/or credibility. In contrast, the kidnapper's success depends on safeguarding his victim. A trained negotiator will know this and understands he/she has more time to develop the scenario; in a hostage siege, the negotiator must buy time.

3. Barricade vs. Non-Barricade Hostage Situation

Barricaded hostage situations are those where the hostage takers have barricaded themselves in with the hostages, fortifying their location and blocking its access from any outside contact. The terrorists cannot leave the site and neither can they receive reinforcements; they also have a weapon or weapons that can harm others, and are threatening to use them (McMains & Mullins, 2001, p. 39). Barricades include explosive booby traps, alarms, use of furniture to block entrances, chains and locks, and any other equipment that will aid the terrorists in securing themselves from any outside intervention. For obvious reasons, the special equipment requirements for an assault force to breach an entrance into these target areas vastly differs from those not fortified. A non-barricaded hostage situation involves any type of hostage scenario that does not require an effective breach to enter the target area. An example of a non-barricade hostage scenario is a terrorist holding someone hostage at gun point out in an open area.

¹¹ In 1974, Dr. Brian Jenkins from the Rand Corporation in California coined the term “the theater of terror”, to describe the shock value created from a hostage incident, and how terrorists will take full advantage of the attention gained. The perpetrator is the star of the production, that is, the leading actor (Bolz, Dudonis, & Schulz, 2002, p. 156).

¹² The term clandestine is given to an operation sponsored or conducted by governmental departments or agencies in such a way as to assure secrecy or concealment. A clandestine operation differs from a covert operation in that emphasis is placed on concealment of the operation rather than on concealment of identity of sponsor. In special operations, an activity may be both covert and clandestine and may focus equally on operational considerations and intelligence-related activities (Joint Pub 1-02, 2003, p. 89).

4. Detention Facility Scenarios

Not all prison and jail incidents are hostage situations. The riot may not even be violent. The prisoners may take over the section of the facility peacefully (p. 39). Detention facility scenarios are fairly simple to control in that the siege usually develops inside a secured and controlled environment (the prison itself); from the onset of the crisis, the designated rescue force controls the target area and has almost all the intelligence required while conducting the assault. Such operations favor the use of chemical agents and/or the use of less than lethal ammunition. They usually lack negotiations and end up in a forced entry to subdue the hostage takers quickly. Standard operating procedures for these types of situations vary from state to state or from one prison to another. The tactics and techniques for detention facility hostage scenarios have been perfected over the last twenty years due to their high frequency and because of the advent of less than lethal ammunition.

5. Criminals or Suicidal Individuals

These types of operations usually involve criminals or individuals with psychological or mental problems threatening to end their lives if their demands are not met. These subjects act in emotional, senseless, and often self-destructive ways. They also have no substantive or very realistic demands. The greatest danger in such operations is to the actual criminal, or to any bystander that might be caught in the crossfire. These operations are characterized by the incremental use of force, coupled with firm negotiations with the ultimate goal of having the individual surrender. Negotiators during these operations try to demonstrate patience and understanding; giving a little without getting anything in return, they provide nonviolent resolution options, and apply active listening skills to lower emotion, defuse anger, and establish rapport¹³.

6. Close Quarter Battle

Close quarter battle (CQB) is intrinsic to hostage rescue operations. FM 100-25, Doctrine for Special Operations, defines CQB as sustained combative tactics, techniques,

¹³ Information gathered on 20 March 2004 during phone interview with Patrol Officer Petras from the Tactical Negotiations Team, Policy and Procedures, Mt. Lebanon Police Department, Pittsburgh, Pennsylvania.

and procedures employed by small, highly trained SOF units using special purpose weapons, munitions, and demolitions to recover specified personnel, equipment, or material. Characteristics of CQB include surprise, speed, and violence of action, and the application of precise discriminatory engagement of targets to gain specific, short-term objectives. This type of operation requires highly advanced detailed planning, synchronization, and integrated assault skills, including advanced marksmanship, explosive entry techniques, and special tactics and procedures to gain surprise. CQB may be conducted in peacetime operations in highly sensitive environments. Prevention of collateral damage is a critical consideration (FM 100-25, 1999, p. Glossary-7).

C. FOUR PRINCIPLES FOR HOSTAGE RESCUE OPERATIONS

1. Intelligence

[Intelligence is] the product resulting from the collection, processing, integration, analysis, evaluation, and interpretation of available information concerning foreign countries or areas. It is information and knowledge about an adversary obtained through observation, investigation, analysis, or understanding (Joint Pub 1-02, 2003, p. 261).

The principle of intelligence as factor in the biorhythm model is defined as the timely, detailed, tailored, integrated, prioritized, rapidly updated, and focused intelligence vital to hostage rescue force targeting and mission planning process (Joint Pub 3-05.5, 1993, p. II-12). The specific intelligence requirements for a hostage crisis are very specific and often very different from conventional or SOF missions. The target intelligence details such as the specifics of possible breaching points, blueprints and diagrams of the structure, exact location of the hostages and terrorists, established routines, all demand very accurate and real time intelligence that uniquely serve the operator on the assault force. To attain this level of detail, technical and human intelligence collection assets must take priority during the siege in order to answer the commander's critical information requirements (CCIR)¹⁴.

¹⁴ CCIR are a comprehensive list of information requirements identified by the commander as being critical in facilitating timely information management and the decision-making process that affects successful mission accomplishment (Joint Pub 3-0, 2001, p. III-26)

The collection of intelligence by human agents, known as human intelligence or HUMINT, can fill in many of the gaps in the knowledge gained by technical collection. The U.S., however, traditionally has been weaker at HUMINT than at technical intelligence (TECHINT) gathering (Vandenbroucke, 1993, p. 153).

Technical intelligence collection during the hostage siege focuses but it is not limited to audio and video surveillance devices, which can collect and provide real time information on what is happening inside the target. The issue at hand is being able to plant these devices inside the target location in order to receive accurate data on the hostages, the terrorists, and the target area configuration. To bridge the intelligence gap when these devices cannot be used, it is essential to employ HUMINT¹⁵ assets in and around the target area, to collect and report the details not answered through TECHINT¹⁶ means. Both collection means must be monitored constantly to pick up any changes inside the crisis site such as movement of hostages from one location to another and the condition, weapons, strength, and capabilities of the terrorists.

Sniper-observer teams provide another excellent means of reconnaissance and surveillance of the target area, and can serve as the emergency assault element in case any triggers¹⁷ are set off during the initial stages of the siege. These teams are force multipliers around the target area, in that they can provide expert advice on the tactical situation by technical and human surveillance means; at the same time, they give the commander an additional course of action for an emergency assault option. Above all, sniper-observer teams are operators first; the information gathered by them is immediately considered processed intelligence by any competent counterterrorist task force.

¹⁵ HUMINT is the collection by a trained HUMINT collector of foreign information from people and multimedia to identify elements, intentions, composition, strength, dispositions, tactics, equipment, personnel, and capabilities. It uses human sources as a tool and a variety of collection methods, both passively and actively, to gather information to satisfy the commander's intelligence requirements and cross-cue other intelligence disciplines (FM 2-0, 2004, p. 6-1).

¹⁶ TECHINT is intelligence derived from the collection and analysis of threat and foreign military equipment and associated material.

¹⁷ Triggers during a hostage crisis are established by the Counter Terrorist Task Force (CTJTF) commander to set off actions according to the approved plan. These can be the moving of hostages to a different location, a fire on the target area, or the actual killing of a hostage or hostages.

Operational security (OPSEC¹⁸) is another critical aspect of the intelligence principle in hostage rescue operations that is closely tied to deception and surprise. The commander of the rescue force, as well as the government and all other agencies involved, must constantly be thinking about operational security measures to protect the force and the plan from being compromised. Strict OPSEC is a force multiplier for hostage rescue forces and cannot be overlooked. Operational security measures were very sloppy during the failed attempt to rescue the Israeli athletes during the Munich Olympics of 1972. There was no control over media or any security cordon of the area, causing the German police forces to expose their plan on national television as they were attempting to conduct a hasty assault against the Black September terrorists. On the contrary, a perfect example of strict OPSEC is Operation CHAVIN DE HUANTAR in Lima, Peru. Throughout the 126 days of planning and preparation prior to the assault, the rescue force and the tunnel diggers were kept in an undisclosed location in total secrecy, while rehearsing and preparing for the daring assault, on a full size replica of the target area (see Chapter III for detailed case study).

2. Surprise

Rescue operations are the only type of military operation in which complete surprise is a precondition....The critical element is always the feasibility of a surprise assault, for the key to success in any rescue operation is the ability to achieve complete surprise (Gazit, 1980, pp. 118, 122).

SOF must achieve surprise to the extent that the enemy cannot react effectively prior to mission accomplishment (Joint Pub 3-05, 1998, p. I-5). The principle of surprise as a factor in the biorhythm is defined as exploiting indirect approaches and doing the unexpected. It often requires bold, imaginative, and audacious actions, particularly when applying combat power directly and with surgical precision (FM 31-20, 1990, p. 1-9). When coupled with deceptive measures, the effects of surprise can be maximized when the hostile forces do not know the means of the disruption and cannot implement effective countermeasures.

¹⁸ OPSEC is the process of identifying critical information and subsequently analyzing friendly actions attendant to military operations and other activities to: (a) identify those actions that can be observed by adversary intelligence systems, and (b) to determine indicators hostile intelligence systems might obtain that could be interpreted or pieced together to derive critical information in time to be useful to adversaries, and (c) to select and execute measures that eliminate or reduce to an acceptable level the vulnerabilities of friendly actions to adversary exploitation (Joint Pub 3-07.2, 1998, p. GL-4).

Surprise means being able to use creativity and agility, not just violence and explosiveness. Take for example Operation WINTER HARVEST—the rescue of Brigadier General James Dozier¹⁹ in January of 1982. After nearly a month of captivity, a U.S. surveillance team reported the exact location and guard patterns of the Red Brigade terrorists that were guarding the General to Italian authorities. A team of ten men from the Italian Carabinieri was on alert, waiting for the right opportunity to enter the apartment and conduct a rescue. When there were only two guards from the Red Brigade guarding the General, the Italians simply walked up to the apartment and knocked on the front door. As soon as one of the guards opened the door, ten Carabinieri stormed the room, subduing the two terrorists and safely rescuing General Dozier (Harclerode, 2001, p. 432).

In *The Principles of War for the Information Age*, Bob Leonard divides the element of surprise into technical and tactical, and describes any force at war as perpetually unready to fight (p. 193). This concept directly applies to the hostage rescue crisis; the rescue force must take full advantage of the technical and tactical means to achieve complete surprise prior to the assault. In a hostage rescue situation, a few seconds can mean the difference between success and failure; a terrorist can shoot a hostage or can detonate an explosive device inside the target area. Absolute surprise is necessary to allow the assault force those critical seconds to neutralize the threat. The loss of surprise will almost automatically mean aborting the plan. Rescue forces must rely heavily on the element of surprise to gain relative superiority²⁰. The element of surprise is closely dependent on a good deception plan, excellent timing, and exploiting the enemy's weaknesses.

3. Operator's Skills

SO [Special Operations] are characterized by certain attributes that cumulatively distinguish them from conventional operations. SO can be designed and conducted to influence the will of foreign leadership to create conditions favorable to U.S. strategic objectives. This may involve

¹⁹ General Dozier was the Deputy Chief of Staff (Logistics & Administration) at the NATO headquarters in Verona, in Northern Italy. He was the highest-ranking U.S. NATO officer in Italy at the time of his kidnapping by terrorists from the Red Brigades. He was eventually rescued in Padua by an elite Italian anti-terrorist police unit, which also conducted the arrests of five of his captors.

²⁰ In *SpecOps*, William McRaven describes relative superiority as "...a condition that exists when an attacking force, generally smaller, gains a decisive advantage over a larger or well-defended enemy" (p.4).

a long-term commitment to achieve the desired result. Alternatively, SO may be principally offensive, usually of high physical and political risk, and directed at high-value, critical, and often time-sensitive targets (Joint Publication 3-05, 1998, p. I-4).

A hostage rescue is a mission specifically tailored for SOF. However, the unique skills required to be successful in hostage rescue operations require a higher degree of expertise not found in regular SOF units. The principle of operator's skills as a factor in the biorhythm is defined as those unique skills and attributes required by the hostage rescue force to successfully dominate and eliminate the threat on a target area, while at the same time safely rescuing a hostage/s. Hostage rescue operations are the most difficult type of special operations missions. They require absolute precision and demand a specific type of force with attributes and capabilities that distinguish them from conventional forces or even regular SOF. The special skills required by a rescue force are even more technical and sophisticated than those required of regular SOF units. Specialized shooting techniques, breaching, technical and tactical surveillance, and close quarter battle, are all special skills specific for hostage rescue. A competent rescue force takes months to create and requires resources and capabilities not encountered in a regular unit. The Joint Pub 3-05 defines these qualities and attributes as the SOF "truths":

(1) Humans are more important than hardware; (2) Quality is better than quantity; (3) SOF cannot be mass-produced; and (4) Competent SOF cannot be created after emergencies arise (p. II-3).

The most important part of a rescue operation is the physical act of actually saving the hostage. In order to do this, the skill level of the rescue force must be high. Hostage operations involve the use of surgical precision fires from snipers as well as from every operator and breacher in the assault force. An error while taking a shot or calculating a charge to blow a door²¹ is not an option. This can lead to disaster for the

²¹ An anemic explosive charge will not help achieve entry and gives terrorists time to murder their hostages and defend themselves. This was the case when Israel's Sayeret Matkal tried to rescue a kidnapped Golani infantry brigade soldier, Nachshon Vaxman, in 1994. The charges used were too small and failed to open the door of the apartment forcing the team to set new charges. By this time the terrorists had already executed Vaxman and were waiting when SM finally charged through the door. They managed to kill the assault team leader before being killed themselves (Information retrieved from specwarnet.net/world/ct.htm, international CT units site on 20 January 2004).

entire operation. Assaulters are required to be able to shoot at a terrorist with exact precision, while moving through obstacles, and be able to discriminate between the terrorist and the hostage being held at gunpoint. Each rescue member must be able to engage a terrorist with killing shots on his very first try, with two rounds to the chest (known as the “double tap”) followed by one to the head, if required (usually if the terrorist is wearing body armor). If the rescuer misses, the terrorist will have time to either shoot back or, even worse, kill the hostage, causing the operation to fail.

Another dimension to the operator’s skill that is specific to close quarter battle (CQB) operations is the operator’s *state and presence of mind*. Not only is the operator required to maximize violence of action, use accurate and selective fires, be flexible, and in tremendous physical condition, but his mental state of mind must carry him through the impossible; he must believe he is indestructible inside kit²². Once the assault begins, he must show no fear and continue to his designated point of domination in each specific room on the target, regardless of what happens in his sector. The rescue force must be comfortable working with one another, knowing exactly how each member of the force is going to react during any given situation, depending on each other for their lives.

We were isolated in an undisclosed location for almost four months. During that time, we rehearsed and trained on a full size replica of the Japanese Ambassador’s residence for most of the day, everyday. I got to the point where I could walk the whole assault blindfolded. I knew exactly who would be to my left and right, how many steps I had to take to a door, and how many seconds it would take me to walk from one room to the next (Personal interview with Major Felix Diaz²³, Army Special Forces, Peru, 19 September 2003).

²² The term “kit” refers to all equipment, to include body armor and weapon, carried by an operator or a regular soldier. The term has been adopted from the British.

²³ Major Felix Diaz gave me a personal tour of the mock up site while in Peru. During the actual assault, a full size brick wall crumbled on top of him; a breaching charge was placed on a door that was booby trapped by the MRTA with a large amount of explosives causing a tremendous explosion, knocking down the entire brick wall. The explosion sent Major Diaz flying approximately 30 feet and covered him in bricks, but he was able to regain his composure and continue the assault.

The very nature of the CQB fight takes combatives²⁴ to a new level, making the operator's psyche critical for his survival. If the operator has any second thoughts as he enters a room or a structure during the assault, he will second-guess himself allowing the enemy just enough time to fire a shot back at him or at the hostage. He might even stop the flow of the assault force, creating chaos and confusion inside the target area, allowing the terrorists to regain their initiative. When an operator dons his protective body armor and special equipment, a "switch is turned on" in his mind—he must believe that he is indestructible and can face any odds.

4. Deception

Military deception assists a commander in attaining surprise, security, mass, and economy of force. Military deception supports military operations by causing adversaries to misallocate resources in time, place, quantity or effectiveness (Joint Pub 3-58, 1996, p. I-2).

Hostage rescue operations require a very different type of approach to help the rescue element reach the entry without being compromised. Deception affords the rescue force the much-needed element of surprise. When used properly, it can direct the terrorist's attention from the assault, or delay their reaction long enough for surprise to be gained at the crucial moment. During the famous Israeli rescue at Entebbe in July of 1976, the Israeli assault force disguised their approach to the target by riding across the airfield in Mercedes sedans (typically used by Ugandan dignitaries), successfully delaying the initial actions of the Ugandan guards.

The deception plan must be considered at the strategic and operational levels of the operation. At the strategic level, the negotiations must maintain the focus of freeing the hostages by diplomatic means at all cost, even in the face of a mounting rescue attempt. On the operational level, the deception plan might give the impression to the hostage takers that the military preparations have nothing to do with the rescue of the hostages.

²⁴ Combatives is the term used to designate hand-to-hand combat. The term has evolved with the advent of urban warfare and close quarter battle. It incorporates the elements of survival, martial arts, wrestling, and grappling, with the overall goal of subduing or killing the enemy at close range.

Because hostage rescue operations are inherently very complex missions that require a mastery of the operational art²⁵, the deception plan is a crucial principle. In *SpecOps*, McRaven mentions the element of simplicity as being crucial in special operations (p. 13). This principle does not apply to hostage rescue operations. A simple plan is a graceful plan, but hostage rescue operations by default, are very complex endeavors and far from being simple. The volatility of the situation, the political implications, the media coverage, and the national test of will, all provide a degree of complexity that must be tampered by any means possible. It is therefore critical to introduce the deception plan at the strategic, operational, and tactical level of the rescue operation. The deception plan can, on one hand, hide military preparations and rehearsals from the negotiations process or the media, or, on the other hand, it can help promote the fact that the country is steadfast in its resolve not to negotiate and rescue the hostages. More importantly, the deception plan can be used to catch the enemy completely off guard, distracting their attention during the initial few seconds of the approach and assault on the target. A drawn out negotiations process can also be a great deception tool to masque an impending assault. The analogy of the frog in a boiling pot applies here; if a frog is thrown in a boiling pot, he will immediately jump right out of it. However, if he is slowly brought up to a boil, he will die before he knows it. The terrorists will not know if things are slowly heating up because of a good deception plan.

There are five categories of deception plans. First, *strategic* deception is planned and executed by and in support of senior military commanders to result in adversary military policies and actions that support the originator's strategic military objectives, policies, and operations. Second, *operational* deception is planned and executed by and in support of operational-level commanders to result in adversary actions that are favorable to the originator's objectives and operations. It is planned and conducted in a theater of war to support campaigns and major operations. Third, *tactical* deception is planned and executed by and in support of tactical commanders to result in adversary actions that are favorable to the originator's objectives and operations. It is planned and

²⁵ Operational art is the employment of military forces to attain strategic and/or operational objectives through the design, organization, integration, and conduct of strategies, campaigns, major operations, and battles. Operational art translates the joint force commander's strategy into operational design and, ultimately, tactical action, by integrating the key activities at all levels of war (Joint Pub 3-0, 2001, p. II-2).

conducted to support battles and engagements. Fourth, *service* deception is planned and executed by the services that pertain to service support to joint operations; service military deception is designed to protect and enhance the combat capabilities of service forces and systems. Fifth, deception in support of *operational security* (OPSEC) is planned and executed by and in support of all levels of command to support the prevention of the inadvertent compromise of sensitive or classified activities, capabilities, or intentions; deceptive OPSEC measures are designed to distract foreign intelligence away from, or provide cover for, military operations and activities.

There are also four major types of deception plans: *feint*, *ruse*, *display*, and *demonstration*. The *feint* is an offensive action involving contact with the adversary in order to deceive the enemy as to the location and/or time of the actual main offensive action²⁶. The *ruse* is a trick of war usually involving the deliberate exposure of false information to the enemy intelligence collection system. The *display* is a static portrayal of an activity, force, or equipment usually to deceive visual observation. The *demonstration* is a diversionary attack or show of force on a front where a decision is not sought (similar to feint, but no actual contact with adversary intended)²⁷.

D. THE BIORHYTHM MODEL

The following section will introduce some of the theory on biorhythms and explain how it relates to hostage rescue operations. Biorhythm theory states that our lives are influenced by physical, emotional, intellectual, and in some cases even intuitional cycles, which begin at birth. At birth, all four states start and begin to rise to a positive peak; then they slowly decline to their low point. On a day where the cycle crosses the critical point, one's abilities can vary wildly. Many major corporations have biorhythm programs on their computers for use in planning important meetings and other events. Some airlines are also known to use biorhythm charts to plan pilot's schedules (Information retrieved from www.mcuniverse.com on 5 August 2004).

²⁶ One of the most impressive forms of a feint was displayed during the De Punt Train rescue in Holland in June of 1977, by Dutch Marines from the BBE (CT unit) against 13 South Moluccan terrorists. Dutch star-fighter aircrafts flew over the hijacked train and kicked in their afterburners right over it, creating a loud and thunderous diversion to cover the approach and assault of the rescue force onto the train (see case study Chapter IX).

²⁷ Information retrieved from the Joint Publication 3-58, 1998, and from Military Deception Course at the Naval Postgraduate School with Dr. Barton Whaley, 2003.

Standard biorhythm theory, which is very simple to understand, is viewed with skepticism throughout the medical community. This skepticism is due mainly because it is almost impossible to assign a fixed number of days to its cycles and automatically assume that they will remain as such for the rest of someone's life. Most biorhythms concentrate on four standard cycles: the *physical* cycle is 23 days long and it influences a broad range of physical factors such as resistance to disease, strength, co-ordination, speed, physiology, endurance, and the sensation of physical well-being. The *emotional* cycle lasts 28 days and governs creativity, sensitivity, mental health, love, hate, optimism, pessimism, passion, coldness, depression, elation, mood, and perceptions of the world and ourselves. The *intellectual* cycle, which takes place over a 33-day period, regulates memory, alertness, receptivity to knowledge, and the logical or analytical functions of the mind: reasoning ability, and accuracy of computations. The *intuition* cycle, which takes place over a 38-day period, affects our unconscious perception, hunches, and instincts; a sort of sixth sense²⁸. This cycle is the least portrayed in most biorhythm literature or commercial programs available through the Internet. On the day of birth, each cycle starts at a neutral baseline or zero point and begins to rise in a positive phase, during which the energies and abilities are high. A very simple computer program can run the equation for a sinusoidal wave divided by the days for the period of the cycle, to provide an output similar to the one on Figure 4.

Another important term in the biorhythm is the *critical phase*. This is the short period (usually one-two days depending on the rhythm), when a rhythm is crossing over to a different phase. During this short time, there is a greater risk of error or accident. In fact, studies have shown that there is a 30-60% greater risk of an accident during those few critical days that a person experiences every month. Although there is no concrete scientific evidence that supports biorhythm theories, the analogy is useful for understanding the different efficiency cycles of the human body and how these relate to the hostage crisis model.

The following chart, taken from the Internet, shows a typical biorhythm program that can calculate a person's biorhythm simply by knowing the individual's date of birth:

²⁸ For further details and personal biorhythm plots go to www.mcuniverse.com, last accessed on 5 August 2004.

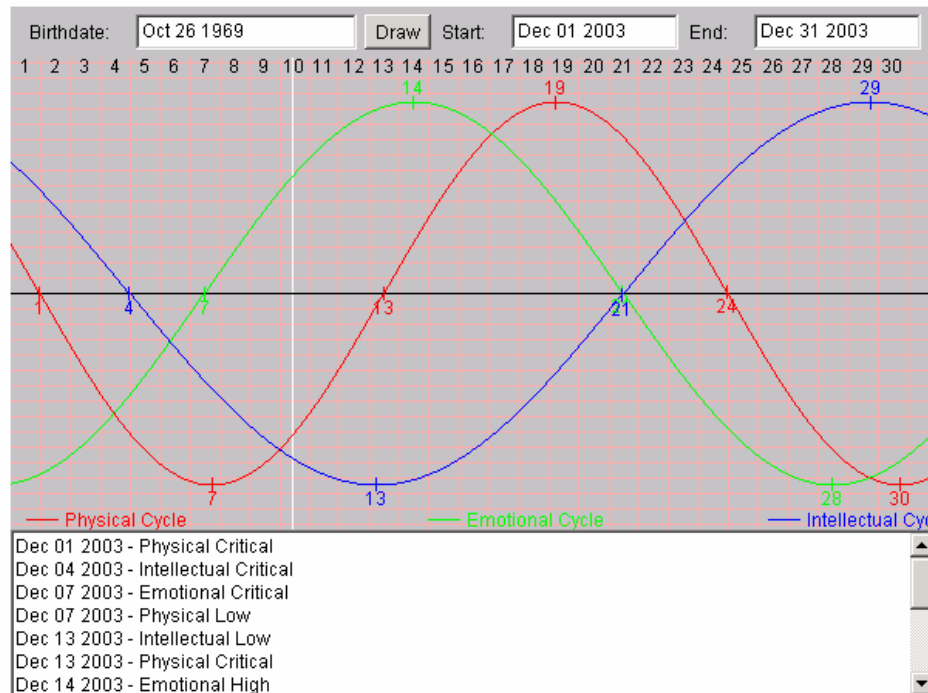


Figure 4. Author's Personal Biorhythm (www.krstarica.com, last accessed on 16 August 2004) 29

For the purpose of this thesis, the term biorhythm is strictly used to make the comparison between the cyclical changes in the biological state of human beings with the changes in the proposed hostage rescue operation's principles: intelligence, surprise, operator's skill, and deception. These imperatives behave in very similar manner to a human biorhythm, therefore the analogy for the model. The term is specifically useful to understand the *operator's skill* factor, when analyzing the biological changes in the human body throughout the crisis. The factors of stress, boredom, time of day, lack of sleep, light, temperature, noise, etc., will oscillate throughout the life of a hostage crisis in the same form of a biorhythm plot. It would be ideal if we could assign day cycles to each principle of hostage rescue with some degree of precision. We could then run a computer simulation based on these values, starting with the initial date of the crisis and see the culmination points. However, this approach, as with any biorhythm theory, is very subjective and almost impossible to prognosticate with precision from one scenario to another.

²⁹ To see a one-month personal biorhythm chart, go to www.krstarica.com, last accessed on 16 August 2004. This site will plot a biorhythm based on your birth date; it will show physical, emotional, and intellectual cycles.

In the spirit of the biorhythm model, we can qualitatively represent the ebb and flow of the composite principles for successful hostage rescue operations. This allows us to observe changes that are critical for the decision maker in trying to decide the best execution time. It is a best-case approach that allows us to see graphically the best windows of opportunity for execution.

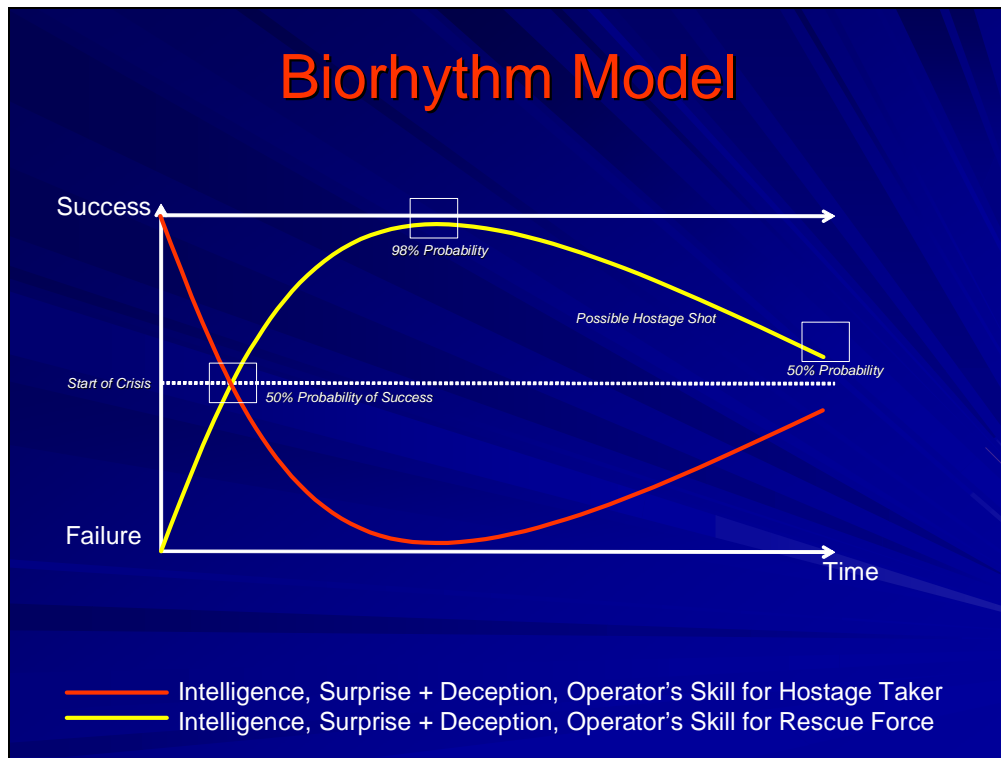


Figure 5. Author's Representation of the Hostage Crisis Biorhythm Model

The model describes how initially, the hostage rescue force is not prepared to conduct the operation and how the terrorists have the upper hand controlling the crisis area. The rescue force has not developed a deliberate action plan or any accurate intelligence on the situation. Furthermore, it has not conducted any rehearsals or gathered any special equipment requirements specific to the target area. The terrorists, on the other hand, are taking advantage of the shock value of their most recent violent action, and are exploiting this window of opportunity to maintain their relative superiority over the hostages as well as any opposing force that might be in or around the target (police forces or security guards). As time goes by, the readiness level of the rescue force increases as well as the intelligence picture and information on the target

area. In contrast, the situation degrades for the terrorists. They begin to feel fatigue due to their static posture while in a high stress environment and their knowledge of the target area has reached its limits. They must now rely on outside information, most of the time provided by a negotiating team. The security posture and readiness of the terrorists begin to degrade significantly; their close proximity to the hostages will weaken their will and make them second-guess their intended cause. The only way for the terrorists to recapture some of their initiative, as portrayed on the graph, is by killing a hostage or by taking some other kind of drastic measure that will help them regain some relative superiority. This will allow them to reestablish a new culminating point and increase their chances of success. When this occurs, the biorhythm plot will describe a “switch back” in favor of the terrorists, and the rescue force must wait until the next window of opportunity.

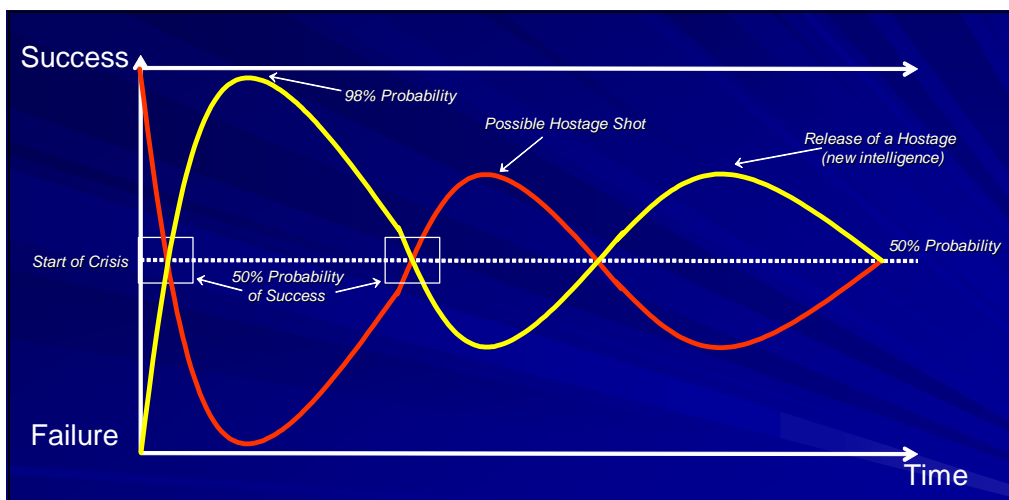


Figure 6. Author's Representation of the Hostage Crisis Biorhythm and Windows of Opportunity

In similar fashion to the human biorhythm model, the hostage crisis model is broken down into three cycles based on the hostage rescue principles. The deception cycle is pooled together with the principle of surprise due to their close dependency on each other as a function of time. The surprise curve will represent both principles. These are portrayed by three distinct sinusoidal waves that oscillate in synchronicity or against each other depending on the nature of the crisis. Below are two examples representing each of the forces involved:

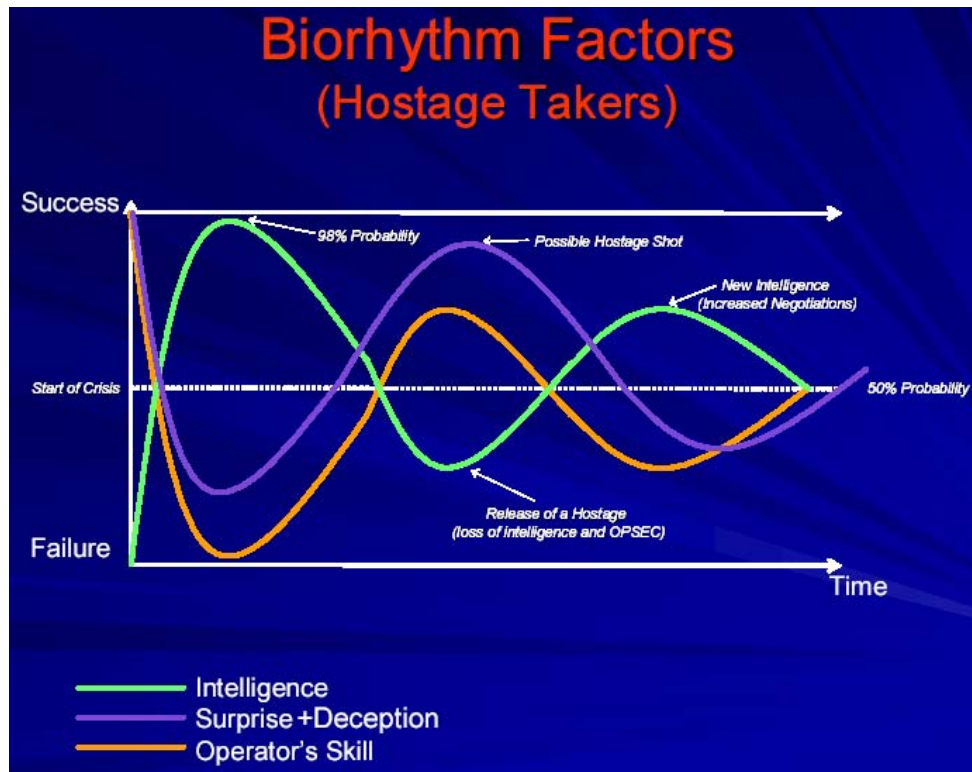


Figure 7. Author's Representation of the Hostage Takers' Biorhythm Factors

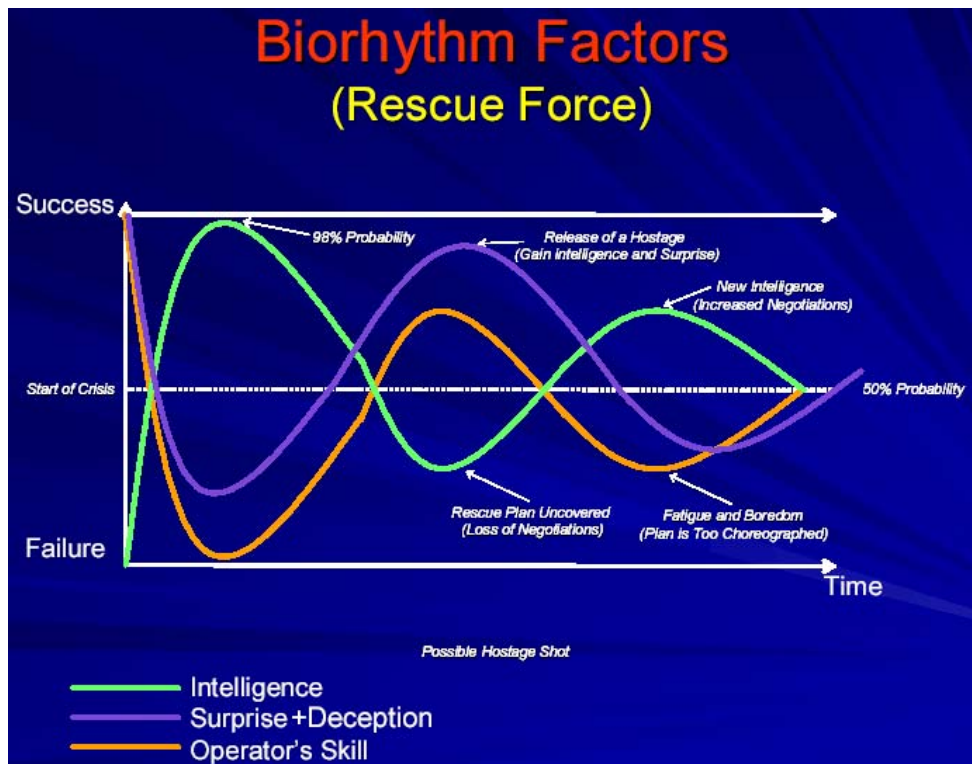


Figure 8. Author's Representation of the Rescue Force's Biorhythm Factors

II. THE RESCUE OPERATION

The rescue operation is the climax of a war, which must be resolved in a single military act...the success, or failure of such an operation means the victory or defeat in that war (Gazit, 1981, p.113).

Hostage rescue operations are dominated by political motives, making them unique from conventional military operations in wartime. They require tactics, techniques, and procedures not normally employed by military forces, and therefore not trained to execute. Embarking on a rescue operation should be the last resort in trying to resolve a crisis. Nevertheless, every attempt must be made to allow for the hostage crisis to develop and its intelligence picture to take shape, in order to facilitate the execution of a deliberate assault by the rescue force. Otherwise, the rescue party will be limited to the conduct of an emergency assault in a vacuum of information, with the hostage takers having the upper hand.

A. ANATOMY OF A RESCUE

Strategic special operations present specific characteristics. The highest civilian and military authorities in the White House and the Pentagon closely monitor the preparation and execution of such raids.... Strategic special operations, moreover, are usually joint endeavors involving several U.S. military services and civilian government agencies.... They are also high-risk ventures for they seek to achieve difficult objectives in a single bid, with deliberately limited means. Because failure in such operations is typically both highly visible and dramatic, the ensuing damage to U.S. prestige tends to be great... (Vandenbroucke, 1993, p. 4).

The most important consideration prior to the start of any rescue preparation is the question of operational feasibility: Does the country responsible for handling the crisis have a dedicated unit capable of responding to such incidents? Does the political environment allow for the use of military action to resolve the crisis? Are the rescue unit's operational and/or tactical limitations too great, preventing them from executing the rescue?

Most countries have a dedicated military or police hostage rescue unit. These types of units are composed of combat seasoned individuals who are highly skilled and experienced in clandestine operations, operations that require creative thinking, flexibility, improvisation, and demand unusual requirements of the operator. Their lines

of command are very narrow to bypass all bureaucratic channels that can slow reaction times. To achieve this high level of professionalism and specific expertise takes time, resources, and equipment, not usually encountered in a standard military outfit. Furthermore, to combine such unique individuals into one cohesive unit that can operate as a whole on a specific mission takes great time and resources.

The success criteria of any hostage rescue operation can vary depending on the operation and the uniqueness of the incident. For our purposes, success for the hostage rescue operation is defined by these three specific conditions:

- (1) The safe rescue of all hostages alive
- (2) Minimal damage to the rescue force's personnel or equipment (any casualties should be restricted to the terrorists)
- (3) The politico-military ramifications at the completion of the operation do not outweigh the risks involved in launching the rescue

Due to the criticality and sensitivity of hostage rescue operations, whatever the situation might be, the overall responsibility for absolute command and control should rest with the political leadership from start to finish. They must decide whether to go ahead and conduct the rescue. They must dictate the constraints and limits for any military operations. They must also approve the final and detailed plan for the operations. They must decide the abort criteria in advance and any deviations from the plan. Finally, they must be in constant contact with the task force, in case it needs to make timely interventions according to new developments (Gazit, 1981, pp. 133-134).

Hostage rescue operations, for the most part, can be broken down into three major phases: Phase I, the *planning, preparation, and rehearsals*; Phase II, the *approach and assault*; and Phase III, the *post assault*. These phases vary depending on the type of hostage scenario; barricaded hostage takers, hostage takers out in an open area or in a hijacked plane, or a lone suicide terrorist, but essentially remain the same throughout.

1. Phase I: Planning, Preparation, and Rehearsals

If the best military generals were asked to plan a successful bank robbery, they would be helpless. Complex rescue operations require the mentality and expertise of a bank robber, and not those of an Army commander who is used to moving 2000 tanks (Gazit, 1980, p. 132).

A hostage rescue operation is the most dangerous and delicate of all special operations missions. Shlomo Gazit³⁰ describes in his article *Risk, Glory, and the Rescue Operation*, four planning principles that distinguish the rescue operation from a standard military operation. First, the search for bright, original, and even crazy ideas. Second, the importance of saving time in the planning and preparations. Third, the early and continual involvement of the political decision-makers so that they will be able to evaluate the planning ideas as they arise. Fourth, the inclusion of the rescue force commanders in the planning process from the earliest possible moment.

Harvey Schlossberg and Frank Bolz from the New York City Police Department, developed tactics that led to the resolution of high-conflict incidents without the loss of life, from the lessons learned at the Munich Olympics in 1972. These tactics are still being taught today at police departments across the country. They noted three conditions paramount for their negotiators, applicable for military hostage rescues. First, the importance of containing and negotiating with the hostage taker in a hostage incident. Second, the importance of understanding the hostage taker's motivation and personality in a hostage situation. Third, the importance of slowing down an incident so time can work for the negotiator (McMains & Mullins, 2001, pp. 2-3).

As mentioned before, *timing* is crucial during the planning process. During the first few minutes of the siege, the terrorists are uncertain if their operation will succeed and therefore at great risk of making fatal mistakes; they must get the hostages under control and down to a manageable size, establish security, and become aware of their operational space and their surroundings. Through these initial moments, the terrorists are at their most vulnerable point. However, the reality is that a hostage rescue unit is

³⁰ Major General Shlomo Gazit (retired) served as Director of Military Intelligence of Israel from 1974-1979. In that post during the Israeli operation at Entebbe, Gazit participated in the planning of that rescue effort. He was Coordinator of Government Operations in the Occupied Territories from 1967-1974 (From introduction of *Risk, Glory, and the Rescue Operation*, Gazit, *International Security*, Volume 6, Issue 1, Summer, 1981, p. 111).

almost never going to be in close proximity to the hostage incident to respond that fast. These units are for the most part based in the capital city of most countries for this specific reason, but anything more than a few minutes distance to the target site, and it is already too late; the terrorists will establish control and gain the upper hand soon after their takeover. After this brief window of opportunity closes, the terrorists will gain relative superiority and assume control of the crisis area. The rescue force must wait for a new window of opportunity to develop. It is then that timing becomes so critical. Waiting allows the situation to develop, intelligence to be gathered on the target area, and rehearsals to be conducted by the rescue force. The longer the wait, the better prepared the rescue force will be to conduct the assault. Along the same lines, the longer the wait, the better the chances are for a negotiating team to establish credibility and come up with a peaceful solution to the crisis.

There are also several drawbacks for waiting though, one of them being the precarious condition of the hostages. The hostages can develop Stockholm³¹ or transference³² syndrome, their health status worsens, and their chances of being killed increase. In addition, the tensions and frustrations inside the crisis area increase with time, setting the stage for a possible violent confrontation between the hostages and the terrorists. Overall, the benefits of waiting outweigh the risks. If the situation at the crisis site is under control, and negotiations are established, the longer the wait the better the chances of success for a rescue attempt.

At the onset of the hostage taking, the designated rescue force must be summoned at once, to start developing an *emergency plan for action*. This plan is utilized if the hostage takers decide to start killing or moving the hostages. From this initial plan, a

³¹ The Stockholm syndrome derives its name from the reaction of the victims during a 6-day siege in a bank vault in Stockholm, Sweden. A lone gunman, trapped during a robbery attempt, herded a man and three women into the vault and then demanded and received the release of a former confederate who had been imprisoned. Eventually, police drilled through the vault, shot tear gas into it, and forced everyone out. As they fled, however, the four hostages encircled their captors because, they said, they wanted to protect them from possible harm by the police. Later, one of the women said she was in love with the bank robber and would wait for his release from prison to marry him. Psychologically, the captor has had life-and-death control over the victim and has allowed the victim to survive, earning a sort of everlasting gratitude (Bolz, Dudonis, and Schulz, 2002, pp. 209-210).

³² Transference is a term used by psychiatrists and psychologists to denote the identification by one person with another. Transference can develop between the hostage-taker or kidnapper and his victims, too, as well as between the negotiator and perpetrator. It is less likely that the perpetrator will kill a hostage when some degree of transference has developed (pp. 210-211).

further more refined *deliberate plan of action* is developed, to be conducted in the event negotiations fail. This plan is never finalized; it is updated and refined continuously as new information and intelligence come in that can aid in the rescue. A third option developed in the rescue planning sequence is the *emergency-deliberate plan of action*; this plan is a variation of the *deliberate plan of action*. It is a contingency plan in the event that the terrorists detect the rescue force during their approach to the target, while conducting the intended *deliberate plan of action*. For example, the rescue force can be moving to the target area surreptitiously and a terrorist might be out for a walk outside of the target area. The rescue force can be compromised at this point and be forced to change their original plan and rush to the target. The new plan now becomes the *emergency-deliberate plan of action*. These three plans become the essence of the rescue order. This is why it is so essential that the operators get intimately involved in the planning process, aware of all the changes and contingencies, able to execute it when the time comes.

The keystone of SOF mission planning is that the operational element executing the mission must plan the mission (Joint Pub 3-05, 1998, p. IV-6).

Not only is it critical that planning occurs at the operator level, but the planning and rehearsals must fully integrate all participants involved with the rescue operation. This was a critical mistake during Operation EAGLE CLAW in 1980—the failed rescue attempt to recover the hostages in Iran. Throughout the six-month preparation and rehearsal process, none of the individual operational elements planned or rehearsed their portion of the operation as one group. Staff planners from JTF 1-79 isolated themselves from the operational element in a futile effort to preserve operational security, failing to disseminate the plan properly. This caused mass confusion once the helicopters departed with the assault force, leading up to the disaster at the DESERT ONE (see Chapter VIII for case study).

Any consideration to conduct a military rescue attempt must take into account the strategic, operational, and tactical, first and second order effects on all four instruments of national power—diplomatic, informational, military, economical (known as the *DIME*). The rescue option should be the last resort, after the diplomatic, informational, and

economical instruments of national power have been exhausted; nevertheless, it should be a synergistic approach from the onset of the crisis, and not one that moves incrementally, waiting to the last moment to stand up a rescue plan of action.

The characteristics of the hostage takers are critical in determining when to conduct the rescue. The intelligence operations require real time precision and ways to disseminate immediately to the rescue personnel as well as the negotiating party. Fusion of all accurate and timely intelligence must focus on developing the most effective plan to rescue the hostages together with the operators in the decision making process.

A valid rescue plan must meet five prerequisites of any military decision-making process. The plan must be *suitable*—it can accomplish the mission and comply with the guidance given from the highest levels. The plan must be *feasible*—it must be able to accomplish the mission within the established time, space, and resource constraints. It must be *acceptable*—it must balance cost with advantage gained by executing a particular course of action. It must be *distinguishable*—each course of action must be significantly different from the others. Finally, it must be *complete*—it must incorporate major operations and tasks to be accomplished, to include forces required, concept for sustainment, deployment, employment, time estimates for reaching termination objectives, reserve force concept, and desired end state.

2. Phase II: Approach and Assault

The safe rescue of all the hostages means success for the operation. In order to accomplish this, each phase of the hostage rescue plan must be planned, rehearsed, and executed with surgical precision. The approach and assault phase of a rescue operation are the most volatile parts of the rescue attempt because the assault force must remain undetected in order to maintain the element of surprise. Once the assault begins, they must immediately neutralize the threat and control the hostages.

During the approach, the rescue force must be ready to execute all contingency plans rehearsed as part of their emergency-deliberate plan of action, in case they become compromised. Full synergy of all command and control elements is required during the approach, in order to positively control the flow of forces into the target and deconflict from those already there (such as sniper-observer teams). The breach must be calculated

with exact precision to ensure the explosion will not hurt or kill any hostages inside, while at the same time allowing for a positive entry of the rescue force into the target. Once inside, the rescue force must be quick, precise, and deliberate in their use of accurate and discriminate fires, while at the same time safeguarding any hostages encountered.

The rescue party must be ready to protect the hostages during the assault. Initially, the effects of breaching, explosions, and firing will shock hostages; they will not know how to react, and sometimes they might even want to help by attacking some of the terrorists. Some hostages might be confused and want to stay behind in the comfort and security of what used to be their own “little world”. Others might want to go and retrieve some of their own personnel belongings before leaving the target site. All these factors complicate the mission of the assault force. For these reasons, all personnel inside the crisis site must be considered dangerous until properly identified by other authorities during Phase III.

3. Phase III: Post Assault

The rescue party should by no means yield to the whims of the hostages. It must be very firm with them, and use physical force to get them out if necessary (Gazit, 1981, p. 126).

Upon the completion of the assault phase, the first immediate reaction of the hostages and the rescue force will be a state of overconfidence and euphoria. The operation at this stage is far from over, and the rescue force must remain in complete control by focusing on returning the hostages to the proper authorities. The first step should be to secure the target area from any outside intervention until it has been deemed safe by the assault force commander. The sniper-observer element must be notified that the target is secured in order to minimize the chance of fratricide. Only when the assault force commander has stated that he is in complete control of the crisis site can follow-on agencies enter to conduct a handover.

All hostages must be carefully identified and accounted for properly. If there are any leaders within the group of hostages, those must be singled out to aid in the process of further identifying the rest of the hostages. The wounded and the dead should then be identified. The rescue force must pay particular attention not to leave any of the hostages

behind during the exfiltration, or take a terrorist with them instead. The terrorist can be hiding a grenade or some sort of explosive and set it off inside the exfiltration vehicle or aircraft, ruining the whole operation. The decision to repair or leave behind broken equipment is also critical during these moments. Contingency plans should address destruction procedures in the event something has to be left behind or repaired in place.

If the rescue occurs in enemy territory, the main priority for the rescue force will be to treat the wounded, either while waiting for the exfiltration or during their transit. If the operation takes place in friendly territory, then the duty to treat the injured lies with other agencies designated for this task; the assault force's primary purpose is the safe handover of the hostages to other competent government agencies. Regardless, no personnel should be allowed inside the target area until it has been deemed safe by the assault force commander. The handover element must have capable forensics experts and legal personnel that will immediately take control of the site and treat it as a crime scene, not letting media or curious personnel enter the target area. Government officials must be ready to issue a public affairs statement to the press, in order to begin the process of quality control of information to protect the rescue force and enforce OPSEC measures.

The following diagram is a graphical representation of all major phases of a hostage rescue crisis. It includes the principles for successful hostage rescue operations to include the close monitoring of the hostage crisis biorhythm. The timeline in days is only an example to describe the process.

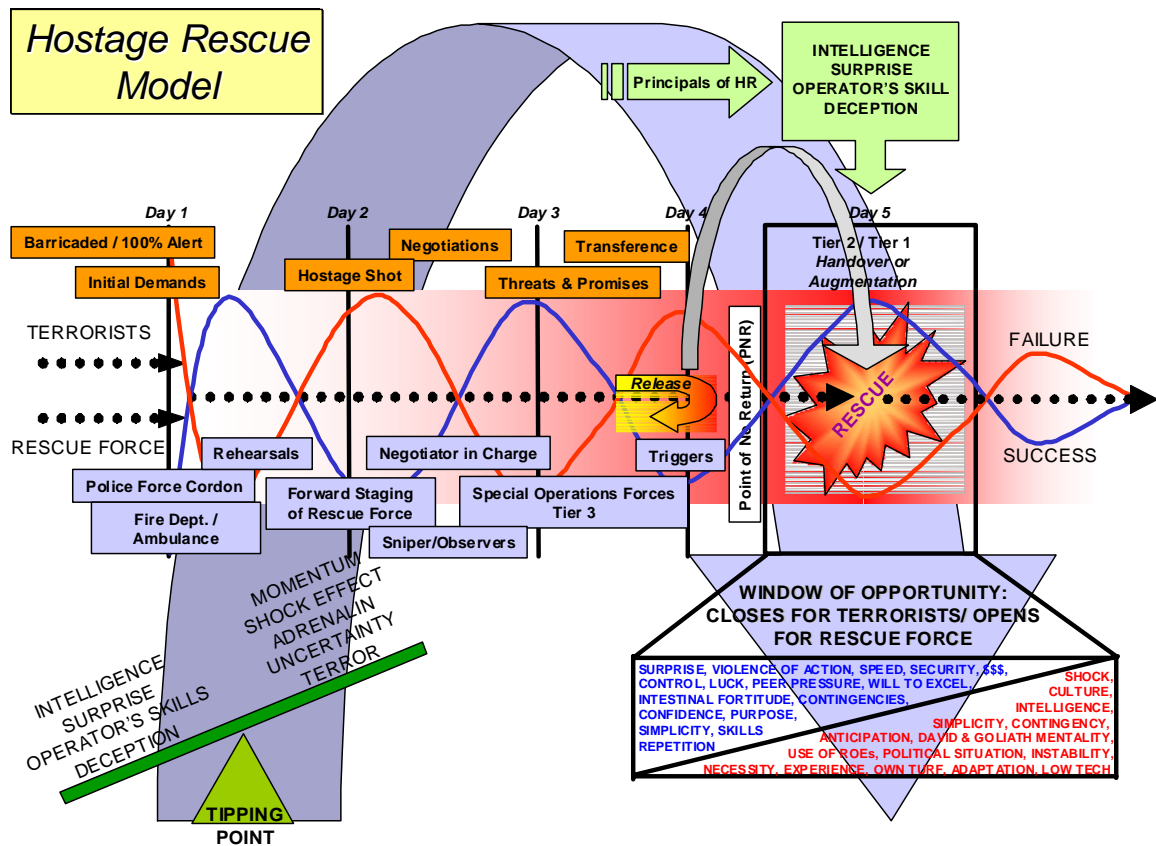


Figure 9. Author's Representation of a Hostage Crisis Diagram Incorporating the Four Hostage Rescue Principles with the Biorhythm

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III. OPERATION CHAVIN DE HUANTAR³³

A. BACKGROUND

The Movimiento Revolucionario Túpac Amaru (MRTA, trans. *Tupac Amaru Revolutionary Movement*) is a traditional Marxist-Leninist revolutionary movement formed in 1983 from remnants of the Movement of the Revolutionary Left, a Peruvian insurgent group active in the 1960s. Its basic aims are to establish a Marxist regime and to rid Peru of all imperialist elements (primarily U.S. and Japanese influence). In order to understand what catapulted the members of the MRTA to conduct such a desperate act of recognition, we must look back and understand the early beginnings of this organization and its patterns of violence throughout the last three decades in Peru.

In early 1982, several leftist parties give birth to the Movimiento Revolucionario Túpac Amaru after a series of negotiations known as “the convergence” (McCormick, 1993, p. 6). On 31 May, they conduct their first unclaimed attack at the *Banco de Crédito de Lima*. This action was not claimed by the MRTA until 1984 (*Caretas*, October 9, 1984, pp. 14-15). The following year, the movement officially adopts the name Movimiento Revolucionario Túpac Amaru in November, and continues to develop and organize until the first part of 1984. An MRTA squad attacks the U.S. Embassy Marine Guard residence in Lima. By 1984, the first MRTA manifesto is made public, vindicating military actions countrywide. This publication called on all leftist organizations, progressive elements within the church, and the Shining Path (Sendero Luminoso or SL), to join in a common armed struggle throughout the country. In January, the first MRTA Central Committee is appointed and named *Jorge Talledo Feria*. On 22 January, the MRTA conducts an attack against the Villa El Salvador police station, marking this first overt political target of the organization. In February, MRTA kidnaps newscast personnel from *Radio Imperial* radio station forcing them to broadcast MRTA

³³ CHAVIN DE HUANTAR is the code name given by President Alberto Fujimori on the day of the operation. During the previous four months, the operation was known as “Tenaz” (trans. “Tenacious”). The name CHAVIN DE HUANTAR was inspired from the ancient pre-Incan civilization of that name, dating 3000 B.C. and located 100 kilometers from the Huaraz capital, of the Ancash sector in the central region of Peru. The CHAVIN DE HUANTAR civilization and culture are known for their spectacular architecture that stands out for its intricate tunnels and underground water irrigation systems that run throughout their entire city. It is also believed that their warriors used these tunnels to fight and defend their city from attackers.

subversive messages that state their purpose and intentions in overthrowing the current regime. This action is repeated several days later at the *Radio Independencia* station. On 8 October, MRTA burns an evangelical church run by American missionaries in the town of Ayacucho.

By February of 1985, the second MRTA Central Committee is formed and named *Carlos Sánchez Neyra*. In April, the first MRTA pamphlet is published under the title *Venceremos* (trans. *We will win*). On 20 March, the local *Kentucky Fried Chicken* in Lima is firebombed. Several other fast food restaurants are attacked and burnt down in the towns of San Isidro, Surco, and Miraflores. In May, MRTA leadership outlines and releases a document that pretends to explain their existence and political expectations. On 30 March, they attack two armories, taking with them large quantities of weapons and ammunition. By 16 June, MRTA intercepts *Channel 5*'s audio signal and transmits their first underground radio message titled *4 de Noviembre* (trans. *November 4th*). On 12 July, MRTA attacks seven police stations simultaneously. On 25 July, they firebomb the Minister of Interior's vehicle while it is in the parking lot. On 4 November, a small MRTA team takes over *La Nación* newspaper, and hands out MRTA propaganda. In December, MRTA sends several military teams to train with the Revolutionary Armed Forces of Colombia (FARC³⁴) in Colombia.

In January of 1986, MRTA rebels take over five radio stations and force them to broadcast MRTA propaganda. From 9 to 14 February, the third MRTA Central Committee is organized. On 8 August, MRTA members attack the Palacio de Gobierno (Peruvian Congress). During this year in June, the infamous prison riots³⁵ take place, leaving 244 prisoners dead, many of them after they had surrendered, by members of the Peruvian armed forces. On 21 April, MRTA detonates a car bomb carrying 60 kilos of

³⁴ Established in 1964 as the military wing of the Colombian Communist Party, the FARC is Colombia's oldest, largest, most capable, and best-equipped Marxist insurgency. The FARC is governed by a secretariat, led by septuagenarian Manuel Marulanda (a.k.a. "Tirofijo") and six others, including senior military commander Jorge Briceno (a.k.a. "Mono Jojoy"). The FARC is organized along military lines and includes several urban fronts (information retrieved from the Dudley Knox Library home website, <http://library.nps.navy.mil/home/tgp/farc.htm> on 1 Nov 03).

³⁵ Incarcerated members of Shining Path staged coordinated uprisings at three Lima-Callao prisons: Lurigancho prison, Lima, Peru; El Frontón prison, Lima, Peru; and Santa Bárbara women's prison, Callao, Peru. The government reacted violently, declaring a war zone in the prisons and calling in the armed forces to quell the riots.

dynamite at the U.S. Ambassador's residence; one civilian is killed and eight other people are injured. Also in April, MRTA rebels bomb the *Citibank* offices in Lima and San Borja, the *SEARS* warehouse in San Luis, the *IBM* warehouse in Breña, the *Binational Center* in Lima and Chiclayo, and the *Coca-Cola* bottling facility in Trujillo. Other sites bombed during the month of April include the Chancery warehouse, the *Dinner's Club* office in San Isidro, the *Summer Institute of Linguistics* in Lima, the *ITT* facility in San Isidro, the *Citibank* office in Miraflores, and the *KODAK* facility in San Luis. In June, the Cayara massacre takes place; a Peruvian military patrol killed about 20 peasants in order to avenge a *senderista* (Shining Path) attack nearby. In December, the MRTA unites with the Movimiento de Izquierda Revolucionaria (MIR, trans. Revolutionary Leftist Movement) at the First Central Committee.

In 1987, the MRTA expands its operations to different regions around the country. It creates the Northeastern Front in the Peruvian jungles. In October, Lucero Cumpa, a Central Committee member, is arrested. On 6 November, an MRTA squad takes over the town of Juanjui for five hours. The second United Central Committee is created in 1988. On 10 August, Generals Hector Jerí and Enrique Ferreyros from the police are kidnapped. That same day, a car bomb goes off at the *Centromin* offices in Lima. In September, MRTA members attack the *Mining Society of Peru* offices. During the same year, MRTA launches two mortar attacks from Arenales Avenue into the U.S. Ambassador's residence—one landed on the roof, the other hit the perimeter fence.

On 13 March of 1989, an MRTA squad takes over the town of Pichanaki, in Chanchamayo district. On 1 May, an MRTA squad attacks the police station at the Tablada de Lurín. On 5 October, television director Héctor Delgado Parker is kidnapped. During this year, Victor Polay Campos, the MRTA's founder and current leader, is captured for the first time and placed in the Canto Grande state prison in Lima.

On 9 July of 1990, 47 MRTA members, including Victor Polay Campos, escape the Canto Grande penitentiary through a 332-meter underground tunnel built by the MRTA. Following their escape, they conduct a mortar attack at the Joint Armed Forces Command. Later on that year, MRTA assassinates Peruvian Army General Enrique López Albújar. The MRTA bombs the U.S. Embassy warehouse, the *Kentucky Fried*

Chicken in Lima, the *Binational Center* in Trujillo, mortar attacks the U.S. Consulate, and fires at the U.S. Ambassador's residence. Alberto Fujimori, a university professor, assumes presidency for the first time in Peru.

On 14 January of 1991, MRTA attacks the Ministry of Interior with a car bomb. On 5 February, a car bomb goes off in front of the U.S. Embassy. On 11 March, an MRTA team frees Lucero Cumpa (a.k.a. Comandante "Liliana"); their getaway driver is killed during the rescue. In May, MRTA kidnaps nine members of the PNP in Rioja. In August, Law 25237, which establishes a peace council, is approved under the initiative of Carlos Torres y Torres Lara, then head of the cabinet. This peace council was established to involve diverse sectors of civil society in drawing up a national peace plan (Arnson, 1999, p. 212). In November, the famous "November Decrees" are passed, strengthening an exclusively military response to the problem of violence in Peru. More MRTA bombings continue during this year at the *Binational Centers* in Huancayo and Cuzco, the *Kentucky-Pizza Hut* in Lima, the *Binational Center* in Trujillo, the Mormon Church in Huaraz, the *Kentucky Fried Chicken* in San Isidro, and the *Wackenhut* contractor company where one guard was killed and two were injured. In addition, a rocket-propelled grenade (RPG) was launched against the Peruvian Chancery building; three separate mortar attacks on different occasions also hit the same building.

In 1992, four Peruvian Army soldiers are killed during a traffic stop on Túpac Amaru Avenue. On April 5, Fujimori conducts his famous *auto-golpe*, giving himself unlimited powers; he closes the Congress, takes control of the judiciary powers, puts an end to regional governments; he concentrates all government power in his person, and begins to govern by decree (Arnson, 1999, p. 213). His total confidence in the armed forces and certain measures approved after the coup played a role in accelerating the defeat of armed insurgent organizations. On 24 July, MRTA mortar attacks the army headquarters and on 9 August, they attack another army convoy in Miraflores. On 11 September, they kidnap businessperson David Ballón Vera. On September 12, Abimail Guzmán is captured by General Antonio Ketín Vidal, head of Dirección Contra el Terrorismo (DINCOTE - National Directorate Against Terrorism). On 10 October, a small squad of MRTA rebels launches three mortars at the U.S. Ambassador's residence.

On 17 November, they bomb the Chancery warehouse damaging three cars belonging to the U.S. government. On 15 December, they kidnap and assassinate businessperson Fernando Manrique Acevedo.

On 16 January of 1993, the MRTA launches an RPG against the *Binational Center* in Miraflores. On 22 January, they fire small arms (three shots) at an *American Airlines* aircraft as it is landing. On 1 February, MRTA kidnaps businessperson Antonio Furukawa Obara. On 22 April, they kidnap businessperson Pedro Miyasato Miyasato. On 7 June, they kidnap Luis Salcedo Marsano. On 9 July, they kidnap Raúl Hiraoka Torres. On 23 September, they kidnap businessperson Enrique Uribe Tasayco. This same year, Victor Polay Campos and some of his most important lieutenants are recaptured at a Chinese restaurant in Lima; meanwhile Néstor Cerpa Cartolini is in Bolivia training and recruiting MRTA support, and is being eyed to be the new #1 man in the MRTA hierarchy.

In 1994, MRTA members firebomb the *Wong*, *SAGA* and *Hiraoka* stores and the *Más* supermarket in Lima. On 21 April, an MRTA squad ambushes an Army truck, killing three soldiers and 15 civilians. On 28 April, MRTA encircles and locks down the towns of Chanamayo and Oxapamapa. The next day they intercept and burn four trucks on the Satipo highway. On 1 July, they conduct a raid on the town of Alto Cuyani, and assassinate the town's vice-mayor. On 12 July, MRTA ambushes an Army truck killing two soldiers. On 26 July, MRTA takes control of the town of Chanchamayo for three days. On 22 October, they kidnap the Pichanaki town mayor Pedro Vargas. President Fujimori vows to "crush" the MRTA by the end of the year. Although he did not succeed, MRTA activity is dramatically reduced. The "Repentance Law", under which the government claims up to 5,000 guerrillas surrendered their weapons, is repealed.

On 25 January 1995, MRTA members ambush a PNP patrol in Chanchamayo, freeing one of its MRTA members. Alberto Fujimori is reelected. On 12 May, MRTA hands out copies of their first edition of their pamphlet *La Voz Rebelde* (trans. *The Rebel Voice*) in the San Marcos and La Cantuta universities. On 12 June, MRTA ambushes a military patrol in the Pichanaki and Chanchamayo districts. On 9 July, a truck full of dynamite is set off in the center of the town of Chimbote. In December, an MRTA group

is arrested as it is preparing to take over the Peruvian Congress; the PNP finds plans, maps, and sketches detailing the MRTA's planned raid. During 1995 however, the group does managed to secure a \$1 million ransom for a kidnapped Bolivian businessperson. Among those arrested is Miguel Rincón Rincón, one of the few leaders not yet a prisoner and the current #2 man in the MRTA hierarchy; American Lori Berenson³⁶; and Nancy Gilbonio, wife of Néstor Cerpa Cartolini. Néstor Cerpa managed to escape and subsequently lead the takeover of the Japanese Ambassador's residence in 1997.

In 1996, the Peruvian authorities claim that the MRTA is a "spent force". Of the group's leadership, only Néstor Cerpa is out of prison; his wife and brother are among the 400 or more of the group's members being detained and funds from criminal activities are running short. On 20 January, MRTA conducts a demonstration in the town of Tarma. On that same day, they attack the Army base of Oxapampa, in Pasco. During the same month, Lori Berenson is sentenced to life imprisonment by a so-called "faceless judge" on a charge of treason for having acted in support of the MRTA. In February, Cartolini sends a videotape to *La República* newspaper announcing the MRTA's intention to continue with acts of violence and their planned intentions to release their jailed comrades. On 20 March, the MRTA attacks the Pachacútec and Oxapampa Army bases. On 3 April, they conduct a raid in the town of Sallique, in the Jaén sector. On 28 April, MRTA members confront the PNP in San José de Sisa in San Martín. On 6 June, the PNP captures MRTA leader Néstor Cerpa in Piura. On 16 June, MRTA conducts harassment operations on the San Juan de Cacazu base in Oxapampa. On 9 July, they ambush an Army patrol from Pichinaki, in Chanchamayo, Junín. On 10 July, an MRTA squad raids the landing zone at the Satipo oil field. On 1 September, they raid the Pichinaki base known as Huantintín. Also on that day, MRTA disseminates propaganda in Arequipa. The following day they ambush an Army patrol in Junín. On 18 September, they raid the town of Oxapampa. On 16 October, they disseminate propaganda in La Loma sector in Maynas, Loreto.

³⁶ Lori Berenson, 31, is currently serving a 20-year prison sentence after a 1996 military verdict found her guilty of helping plan and attack Peru's Congress building with MRTA rebels during that same year. She recently married a Peruvian citizen that aided the MRTA during the same congress attack. They both fell in love while serving time in the Yanomamo prison in Peru.

In early October, Néstor Cerpa and several MRTA terrorists rent and occupy a house in close proximity to the Japanese Ambassador's residence. The house located on Marconi #225, is directly behind the northeast wall of the residence. MRTA members continue to develop and refine a plan for a daring assault on the Japanese residence, unbeknownst to anyone in the area. The new MRTA command planning the operation was named *Edgar Sánchez* and was composed of 14 members: Néstor Cerpa Cartolini ("Comandante Huerta") leader of the group, Rolly Rojas ("El Arabe"), Eduardo Cruz Sánchez ("Tito"), Salvador, Luz Meléndez Cueva Berta ("Melisa"), Giovanna Vilas Plascencia ("Gringa"), Rolando or Dante Córdoba ("El Cuzqueño"), Lucas ("Gato Seco"), Alex, "El Mejicano", Marcos, Leo ("22"), Cone ("Palestino"), Leivi, and Victor Huáscar. They secretly accumulated and stashed explosives, automatic weapons, RPGs, and disguised a vehicle to look like an ambulance, used as a ruse during their initial entry.

In the meantime, members of the Servicio de Inteligencia (S.I.N. – Intelligence Service) had been studying several leads on a possible MRTA attack on one of three embassies: Ecuador, U.S., or Japan. They knew the MRTA was planning a big operation, but could not pinpoint the actual location. Without any further indicators for an impending attack, the security dispatched for the Japanese Ambassador's party was not reinforced.

B. DETAILED CASE STUDY

On 17 December 1996, members of the Movimiento Revolucionario Túpac Amaru (MRTA) assaulted the Japanese Ambassador's (Morihiisa Aoki) residence in Lima, Peru, taking hostage over 700 of its guests. On 22 April 1997, a rescue operation was launched by Peruvian counterterrorist forces killing all 14 MRTA terrorists including the group's leader, Néstor Cerpa, and successfully rescuing 71 of the 72 hostages. The operation effectively ended a 126-day siege, and it remains one of the most successful rescue operations ever staged, a template for future rescue attempts.

The Japanese Ambassador to Peru, Morihiisa Aoki, and his wife, had organized a party at their residence to commemorate Japanese Emperor Akihito's 63rd birthday, with an expected attendance of over 1,000 of Peru's most distinguished dignitaries and government officials. By 1900 hours on 17 December 1996, the Japanese Ambassador began receiving invited guests and by 2000 hours, there were more than 700 people

inside the residence. Meanwhile, 14 MRTA members hidden in an ambulance had entered the traffic security perimeter around the residence and claimed they were responding to an emergency call nearby. Three PNP vehicles were parked at this intersection of Marconi Street and the Italian Clinic; one lets the ambulance go through without any proper checks. The back of the ambulance was filled with explosives, weapons, and ammunition used during the initial entry and during the assault. The MRTA members parked the ambulance at the German Service of Social-Technical Cooperation house, approximately 300 meters from the intersection. At this house, two MRTA members talk to a guard and tell him they are responding to a call from someone inside the house. The guard tells the MRTA that there was no emergency and that no one had called for an ambulance. The MRTA member acknowledges and asks the guard to sign some paperwork to ensure that no one had called for an ambulance and that they had responded as standard procedure. While the guard signed the fake documents, the MRTA members subdued him and occupied the house in preparation for their next planned phase.

Security at the residence and the immediate areas was normal for an event of this type in Peru: eight traffic police officers from the PNP were located at the four corners/intersections to the residence, with the task of checking identification and matching personnel with a guest list. Two PNP motorcycles were constantly circling the perimeter and a special purpose truck from the Unidad de Explosivos (UDEX - Peruvian explosives deactivation unit) was parked near the residence parking lot, checking vehicles. Outside of the residence there were over 50 private bodyguards. Eight security members for the Japanese Ambassador's residence (Peruvian and Japanese) were at the main entrance checking guests and processing personnel through a magnetron (metal detector). At approximately 1945 hours, the U.S. Ambassador to Peru—Dennis Jett—and the Israeli Ambassador—Joel Salpak—depart the residence, each for a separate engagement, unaware of the planned MRTA attack about to occur.

At 2023 hours, a loud explosion is heard behind the residence; everyone inside the residence believes it is a car bomb and runs for cover inside the residence. In a counterproductive move, security personnel immediately lock all entrances to the residence, leaving cordon security and VIP bodyguards outside, and locking everyone

else inside with the assaulting terrorists. The MRTA terrorists had blown a 5' x 4' hole in the back of the adjoining wall that divide the residence with the MRTA occupied home. The breach site is about 25 yards from the front wall (northeast corner) along the east side common wall. The MRTA terrorists immediately enter the residence grounds, firing their weapons into the air, shouting orders and MRTA slogans. The guests assume erroneously that the terrorists are cops who had come to their aid. This illusion quickly vanishes when they notice MRTA red and white handkerchiefs covering the MRTA terrorists' faces, and their mixed uniforms and equipment. The security personnel and guests now realize that the safest place for them is outside of the residence. By 2030 hours, members of the Sub-Unidad de Acciones Tácticas (SUAT - special tactics police), UDEX, and anti-riot units were mobilized, and immediately become engaged in a raging gun battle with the terrorists. All the guests remained lying face down on the floor of the residence, trying to stay out of a hail of bullets.

At the entrance of the residence, the Japanese residence Foreign Security Officer (FSN), Nicolás Tenya Hasegawa, was trapped inside a guard shack with seven other security members. For the next 10 minutes or so, they were under constant machine gun fire from the terrorists inside the residence. They remained inside this shack until approximately 0200 hours, when they finally escaped through a small window that led to the outside of the residence (phone interview with Nicolás Tenya Hasegawa, Foreign Security Officer for Japanese Residence, on 25 September 2003).

At approximately 2100 hours, the order is given for the PNP to commence firing tear gas into the residence, hoping it would bring out the MRTA terrorists. The MRTA immediately don their gas masks and try to control the chaos that ensues inside the residence with the panicking hostages. More than 600 hostages try to cover their faces with whatever they can find. The Japanese Ambassador, Morihisa Aoki, picked up a megaphone and tried to tell the police forces to stop shooting into the residence. Afterwards, Michel Minnig, International Red Cross representative, takes the megaphone from the Ambassador and begs the police to stop the erratic firing of tear gas and bullets, which were endangering everyone inside the residence.

PNP General Ketín Vidal and the Minister of Interior General Juan Briones Dávila show up at the security perimeter to try and take control of the situation and by 2130 hours, the firing stops; 14 MRTA terrorists were now in full control of the residence. Only one of the terrorists, Edgard Cruz Sánchez (a.k.a. “Tito”), was injured, struck by a bullet in his right leg from his own Kalashnikov (AKM) weapon.

At 2135 hours, the first telephonic communication was established with the terrorist leader known as “Comandante Huertas” (Néstor Cerpa Cartolini). He issues a series of demands directed at the government of Peru, to include the release of more than 450 MRTA prisoners around the country. Of his own accord, Michel Minnig immediately begins to negotiate with Néstor Cerpa for the release of all women and elderly people. He proves to be instrumental in the development and resolution of the crisis as an official intermediary throughout the complete hostage crisis.

At approximately 2145 hours, the first of two groups of female hostages are released. Unbeknownst to the terrorists, the mother and the sister of President Alberto Fujimori walked out with these two groups. This marked the MRTA’s first major blunder of many to follow throughout the crisis. The son of President Fujimori, Pedro Fujimori, remained inside and would remain hostage until the end of the crisis. The process of releasing the female and elderly hostages continues until midnight. After the women and elderly were released, the MRTA terrorists decide to release all 20 waiters and staff helpers from the party. The Peruvian Navy Commander Rodolfo Reátegui (President Fujimori’s Aide), wearing only underwear and covering himself with a curtain, tries to mix in with the waiters as they leave. Several terrorists shoot at him, but no one is injured. Néstor Cerpa threatens to kill anyone else that attempts a similar stunt. Afterwards, the terrorists begin to identify all remaining hostages and move them to specific rooms around the residence for ease of control. The hostages are separated according to their jobs and duties: 150 hostages were placed on the first floor of the residence, and the remaining 231 on the second floor. The most important hostages are placed on the second floor: congressional representatives, military leaders, state representatives, ambassadors, ministers, and Japanese businesspersons. A lone camera operator from *América Televisión* (Juan Victor Sumarriva), is spotted inside the grounds

of the residence by Néstor Cerpa, and is permitted to stay there for the next 23 hours and capture the ensuing drama.

In the early morning hours of 18 December, the second conversation between the terrorists and PNP personnel is established; Néstor Cerpa announces that the hostages are being considered “prisoners of war”. By this time, the *Operative Command of the Internal Front* (military headquarters) is established and begins planning and preparing for a military emergency action plan to rescue the hostages. At 0147 hours, the mayor of Miraflores Fernando Andrade Carmona escapes through a small window in one of the bathrooms inside the residence where he had been hiding. He makes a barefoot dash through the residence grounds, hiding between bushes, vehicles, and anything he can find until he makes it to an open gate on the east side of the residence to freedom. The lone camera operator captures the whole scene on live television. A few hours later, 21 members of the International Red Cross arrive on scene and begin to work providing aid in any possible way. At 0220 hours, members of the SUAT occupy nearby homes and emplace temporary sniper positions on the rooftops. Later that morning at 1130 hours, Cerpa announces to the PNP over the megaphone his first official threat: he is going to execute the first hostage at noon if his demands are not met. At 1145 hours, he repeats his threat, this time calling on President Fujimori to answer his demands, including that his first victim would be Minister of Foreign Relations Francisco Tudela (highest-ranking hostage inside the residence). At noon, Cerpa extends the execution time to 1300 hours; he never carries out his threat and President Fujimori never answers his demands. Later that evening, the MRTA terrorists collect all the phones and beepers from all the hostages and place them in a large trash bag.

Michel Minnig continues to negotiate the release of several other hostages that needed medical attention, and by 1830 hours Juan Günther (president of the Lima Patrimonial), José de Cossío Ruiz de Somocurcio (Peruvian Ambassador in retirement), and Mr. Kotaro Kanashiro are released. Mr. Kotaro Kanashiro had fainted during the initial explosions and remained unconscious behind some trees on the residence grounds throughout the day. When he came to his senses, he did not know what had happened. The camera operator picked Mr. Kotaro up and explained to him what had transpired while he was unconscious.

The MRTA terrorists decide to designate several other ambassadors as spokespeople and main negotiators: Anthony Vincent (Canada), Heribert Woeckel (Germany), Alcibiades Carokis (Greece), the French Counselor Hyacinthe D'Montera and the Peruvian Aide to the Counselor Armando Lecaros. Once released, they read a statement given to them by the terrorists and immediately begin a commission to establish negotiations with the MRTA members. Anthony Vincent would prove to be critical in providing the initial intelligence on the terrorists, thanks to his background as head of counterterrorism task force for the Canadian Ministry of Foreign Relations. President Fujimori, who had already assigned Education Minister Domingo Palermo as the main spokesperson on his behalf, quickly disbands this ad hoc commission assigned by the MRTA. Later that evening, the PNP and the S.I.N. order all phone lines to the residence cut off as well as the cellular phone signal in a 400-meter radius to restrict communications in and out of the residence.

On 19 December 1996, President Fujimori meets with the Japanese counselor Yukihiro Ikeda and at 1805 hours, three businesspersons are released—Juan Shimabukuro Yamashiro, Fidel Aray Aray, and Noka Seitoko Sueyoshu. In addition, the president for *Nissan Motors*, Carlos Chiappori Cambana is evacuated for health reasons. Camera operator Juan Victor Sumarriva, from the local news agency who had been caught on the grounds of the residence during the siege, walks out with this group of people. By this time, the PNP had shut off all power and water to the residence. The hostages began to hang cardboard signs around the residence's windows, requesting food and water. United Nations representative Luis Thays sends five hundred rations to the residence. The rations were divided into two groups of diets: one specifically for the Japanese hostages and another for the rest of the hostages based on a standard Peruvian diet. Meanwhile at the U.S. Embassy, members of a designated crisis reaction team from the Department of State (DOS) began to arrive and establish a crisis reaction center to monitor the status of the crisis, specifically the seven U.S. hostages³⁷ that remained inside. The crisis reaction element grows to over 50 personnel during the next several weeks.

³⁷ The US hostages are Narcotics Assistant John Crow, AID Officer Andrew Maxey, Economy Counselor John Riddle, Political Counselor Jimmie Wagner, AID FSN Pedro Carrillo, Acting AID Director Donald Boyd, AID Deputy Executive Officer David Bayer, and AID Officer Kris Merschod.

At approximately 1930 hours, Cerpa addresses the hostages using the name of “Comandante Hermigidio Huerta”, in honor of his MRTA friend who had died in the *Cromotex* textile plant incident³⁸. In his speech, Cerpa explained the origins of his organization, its ideology, and differences from Sendero Luminoso (Shining Path), previous conflicts with Abigael Guzmán Reynoso³⁹, and war stories from encounters with the PNP and armed forces in the Peruvian jungles. He mentioned that his outfit was designated *Pelotón de Fuerzas Especiales* (trans. Special Forces Platoon) *Edgar Sánchez* and that this operation was code-named “Operación Torre Condesú” with the codeword “*Rompiendo el silencio, el pueblo los quiere libres*” (trans. “*breaking the silence, the people want you free*”) (Chávez López, 1998, p. 51).

During the early morning hours of 20 December 1996, several hostages hang cardboard from the second floor bathroom window that read: “*We have no food, water, power, or telephone. Reconnect*” (p. 55). At approximately 1925 hours, Michel Minnig negotiates the release of 38 hostages. Peruvian Congressman Javier Diez Canseco walks out in this group with two written demands: one from the MRTA terrorists demanding the release of 400 of their prisoners from jails around the country, and another demand by the hostages requesting that the PNP not shut off the power, water, or cut the food supplies. By now the MRTA has an official list of demands. The following is the list of demands as reported by the U.S. Embassy’s Regional Security Office (RSO):

First, a commitment to change the course of the economic policy for one that seeks the well-being of the vast majorities. Second, the release of all prisoners belonging to the MRTA and those accused of belonging to our organization. Third, transferring the commando group that attacked the Japanese Ambassador’s residence along with the comrade trade prisoners of the MRTA to the central jungle area. Several duly selected hostages would travel with the group as guarantors and be released once in MRTA guerrilla area. Fourth, payment of a war tax (Department of State After Action Report: Peru Hostage Taking Incident, dated December 30th, 1996).

³⁸ 1979 labor dispute in which six union protesters were killed by PNP forces, while attempting to take over the plant. Néstor Cerpa participated in the strike and was arrested and imprisoned for a year as a result of it. The dispute was one of the catalysts that led to the formation of the MRTA movement.

³⁹ Abimael Guzmán Reynoso, leader of the terrorist movement Sendero Luminoso, was captured in 1992 together with some of his most important lieutenants.

On 21 December 1996, President Fujimori breaks his silence and replies to the terrorists that he will not negotiate and for the terrorists to put down their weapons and release all the hostages unharmed. In reply, Cerpa mentions that there would be more hostages released in the upcoming days. Afterwards, the former counselor Francisco Tudela and the Japanese Ambassador Morihisa Aoki send a message requesting the Peruvian government to negotiate with the MRTA terrorists.

Rumors are “leaked” to local news agencies that British, Israeli, and U.S. Special Forces units were sending their elite counterterrorist forces in country to resolve the hostage situation. The Panamanian press reported that “there were elements of the U.S.’ SFOD-Delta in Panama preparing to launch a rescue mission”. Several reports around Lima mentioned the planned use of nerve agents by different counterterrorist forces for a possible rescue attempt. It is believed that this move was to prevent a response such as an international rescue force intervention, mainly from the U.S. or Great Britain. Later on that evening, approximately 8,000 people gather at the Lima cathedral to pray for a peaceful resolution to the hostage crisis.

On 22 December 1996, the MRTA terrorists hang signs from the residence’s windows painted on white sheets, requesting power, phone, and water to be restored. At 2140 hours, six groups of hostages totaling 225 without ties to the Peruvian government were liberated as a “Christmas Spirit” gesture. All seven U.S. hostages were released with this group. There were still four spouses (Peruvians or third country nationals) of Americans held hostage. In a bold act of defiance, Jesuit priest Juan Julio Wicht decided to stay as a hostage of his own accord, and offered a mass inside the residence for everyone present. One hundred and six hostages were left inside the residence. One of the released hostages, former Labor Minister Sandro Fuentes, read a new statement given to him by the MRTA, requesting the release of the MRTA prisoners.

The following morning, President Fujimori and Minister of Interior Juan Briones Dávila held a meeting with the regional armed forces commander, General Luis Malásquez Durand. Representative Moisés Pantoja was in urgent need of medical attention. From Europe, MRTA representative Isaac Velazco issued a statement and

warned President Fujimori that in the event of a military rescue attempt all hostages would die.

Twelve hours before midnight on 24 December 1996, First Lady Keiko Sofia, daughter of President Fujimori, brought eight baked turkeys to the residence. The terrorists did not let the hostages eat the turkeys, fearing that weapons or other artifacts were hidden inside of them. That day, the government of Uruguay released two Peruvian MRTA terrorists from prison: Luis Alberto Miguel Samaniego and Sylvia Soria Gora. At 1830 hours, Uruguay's Ambassador to Peru Tabard Bocalandro Yapeyú, was released by the MRTA. This action goes against President Fujimori's intentions and efforts, and in retaliation against the government of Uruguay Fujimori removed the Peruvian Ambassador to that country.

During the following days, the S.I.N. begins to infiltrate numerous electronic surveillance devices inside items such as thermoses, picture frames, brooms, and portable toilets. Audio and video surveillance monitoring begins from across the main street from the residence while the terrorists remain completely unaware of it.

On 25 December 1996, Archbishop Juan Luis Cipriani enters the residence for the first time, and remained there for close to seven hours, offering a Christmas mass with Father Wicht. At 1720 hours, Cipriani walks out with the First Secretary to the diplomatic mission of Japan, Kenyi Hirota, who was released because of severe dehydration. The same day, Russian President Boris Yeltsin offers to send a counterterrorist unit to intervene in the crisis. President Fujimori turns down all international assistance with respect to counterterrorist aid. There are 104 hostages still left inside the residence.

On 26 December 1996 at 0147 hours, an explosion goes off at the residence, and all PNP forces go on full alert. It was believed that a cat triggered one of the booby traps placed by the MRTA members on the residence grounds. The MRTA had mined and booby-trapped the residence's grounds to include the residence's windows and doors. At 1445 hours, the MRTA releases the Ambassador of Guatemala, José María Argueta. The same day, the Bolivian government vehemently rejects negotiating the release of five MRTA terrorists held in their country in exchange for their Ambassador Jorge Gumucio.

The following day, the Peruvian government declares a state of emergency in the Callao and Lima districts because of the siege. Members of the International Red Cross indicate that the MRTA had placed mines on the residence grounds. Also on that day, a woman was apprehended inside the security cordon for not having proper credentials and carrying diagrams and blueprints of the Japanese residence. That same day, the S.I.N. begins to make arrangements in total secrecy to contract and transport 32 miners from the Cerro de Pasco area in La Oroya, to begin digging underground tunnels to reach the residence grounds. The miners would work in eight-hour shifts under the orders of a Peruvian Army Corps of Engineers officer working for the S.I.N, and be paid double their normal rates. The mining group grew to almost 60 by the end of January, with more groups being specifically flown in from the Cerro de Pasco on a special commission directed by President Fujimori himself.

On 28 December 1996, government spokesperson Domingo Palermo and Archbishop Cipriani enter the residence and hold conversations with the terrorists. They remain inside for over three hours and at 1600 hours, 20 more hostages are released, including the ambassadors from the Dominican Republic and Malaysia. Domingo Palermo comments that the meeting with Néstor Cerpa was very productive. Meanwhile, dirt retrieved from digging the tunnels is constantly being taken out of the perimeter area in the trunks of police vehicles, ambulances, and service vehicles. In addition, a group of intelligence agents from the S.I.N. enters the residence dressed as gardeners and takes earth samples to analyze soil composition around the residence. The results were later used by the Corps of Engineers in the construction of the tunnels. There are 83 hostages still inside the residence at this time.

On 29 December 1996, the International Red Cross and MRTA agree to let the hostages write letters to their relatives. The Japanese Prime Minister Ryutaro Hashimoto announced in Tokyo that measures taken by President Fujimori were working. In the meantime, MRTA terrorists hang three signs from residence windows that read,

The people want peace with social justice”, “Our prisoners do not receive humanitarian treatment”, and “The social fighters also deserve liberty (Chávez López, 1998, p. 87).

The next day, the first 83 letters from the hostages are received by the International Red Cross and forwarded to their relatives and/or loved ones. All the letters were carefully checked and reviewed by the MRTA. However, the hostages had already developed a system to send secret messages by writing on the trash that was taken out daily out of the residence by the International Red Cross.

On 31 December 1996, several news crews were allowed inside the residence for an impromptu news conference with the MRTA terrorists. Néstor Cerpa Cartolini was interviewed along with Francisco Tudela and Morihisa Aoki; the Japanese Ambassador took the opportunity to apologize publicly for the situation, blaming himself for the crisis. The S.I.N. took full advantage of this opportunity and planted several camera operators as reporters to gather intelligence. Critical intelligence was collected depicting structural information on the residence, weapons and ammunition of the terrorists, as well as their strength and disposition. At 1700 hours, the Ambassador of Honduras and the Argentinean Consul were released. Eighty-one hostages are still left inside.

On 1 January 1997, Monsignor Cipriani enters the residence to offer a New Year's mass. Michel Minnig and Monsignor Cipriani leave the residence at around 1700 hours. At 1725 hours, seven new hostages were released: five Japanese businesspersons and two Peruvian government officials. Seventy-four hostages remain at the Japanese Ambassador's residence until 17 January and 26 January when the last two hostages are released; after 26 January no other hostages are released. These two hostages were high-ranking PNP officials who were released due to critical health conditions.

On 2 January 1997, the U.S. Ambassador to Peru, Dennis Jett, completely supports Fujimori's non-negotiating stance with the MRTA terrorists. That same day the Japanese Emperor Akihito asked Fujimori for a peaceful resolution to the crisis. In a reckless act by the press, the identity of Vice Admiral (ret.) Luis Giampietri is revealed, as the officer in charge of the FOEs (Fuerza de Operaciones Especiales or Peruvian Navy Special Forces) during the early 1980s. As a result, Giampietri was interrogated and submitted to continuous harassment and mock executions by the MRTA terrorists during the next several days. Giampietri maintains his calm, and vehemently denies any criminal involvement during the prison riots involving MRTA during his tenure. Vice

Admiral (ret.) Luis Giampietri earns the respect of the MRTA terrorists, and they leave him alone for the rest of his captivity.

On 3 January 1997, the Guatemalan government announced to the Peruvian government that they are willing to negotiate with the MRTA, upon President Fujimori's consent. S.I.N. personnel continue the tedious process of sorting out all trash that leaves the residence in search of messages from the hostages.

On 4 January 1997, the MRTA terrorists hang three more signs from the rooftop of the residence, reiterating their demands to the Peruvian government and criticizing President Fujimori's declarations. The Japanese newspaper *Mianichi Shimbun* reported that the MRTA was demanding \$30 million for the release of the Japanese hostages being held inside the residence. The next day, Monsignor Cipriani enters the residence to drop off a guitar. Cipriani did not know that this guitar had hidden electronic surveillance equipment for the hostages, specifically for Vice Admiral (ret.) Giampietri to communicate with the S.I.N.

On 6 January 1997, the MRTA members fire two shots into the air from inside the residence. Vice Admiral (ret.) Giampietri begins transmitting messages using the guitar given by the International Red Cross. He receives information through a beeper that was hidden from the terrorists during the initial shakedown period, and responds by talking directly into the guitar to transmit. Giampietri proceeds to send between 30-40 messages daily, detailing critical intelligence required to develop the rescue operation. The following morning a reporter from the Japanese TV station *Asahi* (Mr. Tsuyoshi Hitomi), and his translator infiltrate the security perimeter of the residence undetected, and conduct a 10-minute interview with Cerpa; they were later apprehended by the DINCOTE.

By 8 January 1997, the International Red Cross informs that the exchange of more than 800 letters between hostages and their families has been facilitated through their efforts. President Fujimori again demands the release of all 74 hostages still left inside the residence, and reaffirms that there would be no negotiations. Monsignor Cipriani returns to Ayacucho frustrated with the standoff. The following day, the Peruvian government announces that Francisco Tudela would remain as the current counselor.

Later on that day, MRTA terrorists hang new signs stating, “Mr. Fujimori, don’t lie. Money does not matter to us; the demand is the freedom of our prisoners” (trans. from *El Comercio*, January 10, 1997, p. A-5).

On 10 January 1997 at 0345 hours, the MRTA fires at PNP officers outside of the residence for being too close to the walls. Fujimori announces that there will be no more negotiations between Domingo Palermo and Cerpa, because of Tsuyashi’s (Japanese reporter) presence inside the residence. The next morning, Fujimori announces that several countries are willing to provide asylum for the terrorists. He also states that he would not need any outside assistance from international counterterrorist forces. At 1530 hours, negotiations begin again with the MRTA and Monsignor Cipriani, together with a representative from the International Red Cross. At 1930 hours, the DINCOTE releases the Japanese reporter.

On 12 January 1997, the news media releases critical information on one of the negotiations between Cerpa and Cartolini, provoking a stop in further negotiations. President Fujimori announces that force would be used in the event that one of the hostages was harmed. The following morning, the MRTA terrorists hang a new sign requesting *América Televisión Channel 4* to come up to the residence to talk about their demands; *Channel 4* is not allowed to see the terrorists. At 1121 hours, 12 shots were fired sporadically from inside the residence. By 0400 hours on 14 January, more shots are heard from inside the residence, and a new group of news personnel is stopped from trying to enter the residence. In a press conference, the Ecuadorian president, Abdalá Bucaram, requested the Peruvian government not to give in to the terrorists’ demands, and stated that he fully supported President Fujimori’s hard stance.

On 15 January 1997, the MRTA terrorists accept a proposal by the Peruvian government to create the Guarantor Commission for the peaceful resolution to the crisis. MRTA requests a representative from Guatemala and another from Europe to be a part of the commission. The next day negotiations come to a stop between MRTA and Palermo due to unresolved differences.

The mother of Yolanda Vila Placencia, one of the MRTA terrorists inside the residence, asks her to quit the MRTA and get out of the residence. There are still

seventy-three hostages inside the residence. The following morning, two Japanese hostages are seen on the rooftop placing new signs by the MRTA, requesting the liberation of their prisoners. Later during the day, the Second Secretary to the Japanese residence was seen outside on the residence grounds, charging radio batteries for the terrorists.

On 21 January 1997, Michel Minnig arranges for a house near the residence (Tomas Alva Edison Avenue #257), to be used by spokesperson Palermo for negotiations with the MRTA. The following diagram describes the procedures used during each negotiations session between the Guarantor Commission and the MRTA representative (“El Arabe”, trans. The Arab):

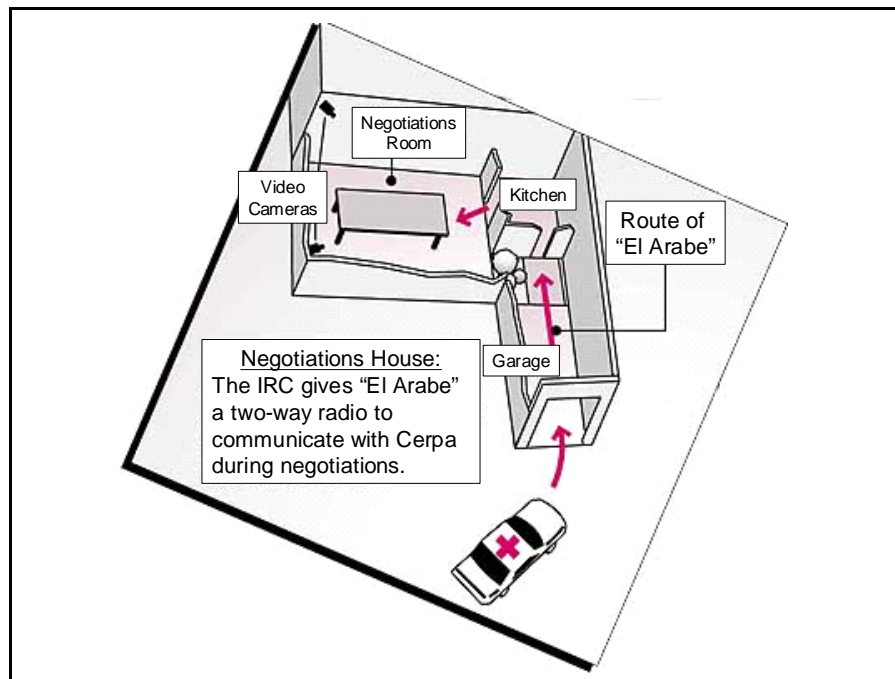


Figure 10. Author’s Representation of the Negotiations House

The following day, President Fujimori states that there will be no dialogue with the terrorists if they insist on the liberation of their prisoners. Also on that day and for security reasons, the International Red Cross is restricted to the number of visits to the residence. In a show of force to harass the terrorists, a PNP helicopter flies over the residence and explosives disposal units show up around the security perimeter. The

terrorists in an aggravated response shoot their AKM rifles into the air through the windows of the residence.

On 23 January 1997, President Fujimori travels to Bolivia and pays a surprise visit to the Bolivian President Gonzalo Sánchez de Lozada, to talk about the hostage crisis. The next day Fujimori meets with 150 Japanese tourists and talks to them about a peaceful resolution to the hostage crisis. That afternoon the PNP informs that the MRTA is firing automatic weapons aimed at the PNP in retaliation for another of their demonstrations.

Thanks to a petition by Monsignor Cipriani, PNP General José Rivas Rodríguez is released due to his critical state of health at 0054 hours on 26 January 1997. He was the last hostage to be released until 22 April 1997, with Operation CHAVIN DE HUANTAR. At 1712 hours, the MRTA fires four shots at the PNP security cordon. Before sunrise on the following morning, 12 loudspeakers are installed at the main entrance of the residence, and loud music and patriotic hymns are played all throughout the day in what became a psychological operations battle between the PNP and the terrorists for the next several weeks. At 1530 hours, PNP officers began maneuvers around the perimeter of the residence. At 1715 hours, an MRTA terrorist fired his weapon at a PNP officer inside his vehicle.

On 28 January 1997, the MRTA terrorists and PNP officials continue the propaganda battle with music and different noises playing back and forth. The main purpose of the PNP loudspeakers was to muffle the noises made by the miners digging the underground tunnels under the residence. The hostages cannot sleep and become increasingly nervous and stressed out with the loud music and noises.

We asked ourselves, why in the world would they [PNP] play such loud music every day? The MRTA terrorists would just put earplugs in and we would just sit there and suffer. It was deafening, all day and night! (Personal Interview with Vice Admiral (ret.) Giampietri on 22 September 2003).

At 0600 hours on 29 January, the first military march was heard for the next 20 minutes, and again at 1800 hours. At 1315 hours, a group of medics from the *Arzobispo Loayza Hospital* enters the residence and provides aid to several distressed hostages

because of the loud music and noise propaganda. PNP sources believe that MRTA terrorists have five or six informants outside of the residence, informing them of every action taken by the police and military forces. It is believed that the leader of this informant group is Hugo Avellaneda Valdez. It is also believed by the hostages that several news agencies are providing information to the terrorists via radio communications.

On 30 January 1997, President Fujimori meets with 43 wives of the hostages and other family members, to talk about the crisis and request their support in keeping calm. A small hospital is established inside the residence grounds next to its main building. This area was the new negotiations site for all upcoming meetings between the MRTA and the negotiating team. Four medics and a nurse remain there to work and treat hostages as well as terrorists. The next day, members of the SUAT conduct a live fire exercise demonstration on hostage recovery operations at their unit compound in front of Japanese news cameras as a show of force for the MRTA.

On 1 February 1997, President Fujimori and Hashimoto send a message to the terrorists agreeing to have a direct dialogue with them; they name Terusuke Tarada as a new member of the Guarantor Commission. Later that day, President Fujimori travels to Canada where he meets with Prime Minister of Japan, Ryutaro Hashimoto, and signs the *Joint Declaration of Toronto*. This declaration reaffirms the intentions on both sides (Peru and Japan) to end the crisis peacefully, with priority given to saving human lives (Chávez López, 1998, p. 122). The following day, President Fujimori travels to Washington and meets with President Clinton. He revealed that MRTA terrorists are not demanding the release of their prisoners anymore, and that they were willing to begin dialogue once again. President Clinton praises Fujimori's efforts and hard stance. On 4 February, President Fujimori travels to the Dominican Republic and meets with President Leonel Fernández. President Fernández stands by President Fujimori and encourages a quick and peaceful resolution to the crisis. Back at the Japanese residence, six shots are fired during the night by MRTA terrorists. When asked to explain the spontaneous shooting, Cerpa replied that it was to commemorate the death of Hermigidio Huerta and the five labor workers from the *Cromotex* textile plant that had died almost 20 years ago in a hostile takeover led by Cerpa.

On 6 February 1997, at 1030 hours, Monsignor Cipriani and Michel Minnig begin negotiations once again with the MRTA terrorists. The next day, between 1030 hours to 1700 hours, all hostages are given a medical examination. The following day, President Fujimori travels to London and meets with Prime Minister John Major. The Prime Minister fully supports Fujimori's intentions and advises that the negotiations process continue.

On 9 February 1997, Monsignor Cipriani says a mass inside the residence and hears the confessions from dozens of hostages. The following day, the MRTA terrorists throw a grenade at PNP officials in a nearby house in response to provocations made by the police. For the next three days, Domingo Palermo has official talks with Rolly Rojas (MRTA #2 man also known as "El Arabe"). Also that day, Tsuyoshi Hitomi, the Japanese reporter that fooled security forces and infiltrated the residence, enters the residence again and introduces radio equipment for the terrorists to use during interviews. He claims the equipment is so he can maintain contact with the hostages and their captors.

On 20 February 1997, Palermo has talks with Rolly Rojas for the fourth time. During these negotiations, Néstor Cerpa attends for the first time. Rafael Merino, a S.I.N. member, is infiltrated as part of the negotiations team and gathers valuable intelligence. Four days later, Cerpa Cartolini comes out of the residence and wants to talk to the Peruvian government's representative, Palermo. Cerpa announces that more hostages would be released in the upcoming days. The fifth set of talks is conducted with no real progress on that same day.

On 25 and 27 February 1997, Palermo has talks with MRTA for the sixth time and seventh time with no real progress once again. Late at night on 1 March 1997, MRTA terrorists hang new signs from the windows, responding to Fujimori's messages and his non-negotiating stance. Two MRTA terrorists were seen at night patrolling the rooftop of the residence in full combat gear, carrying their weapons, ammunition, and grenades. The next day, President Fujimori makes a surprise visit to the Dominican Republic to meet with President Leonel Fernández and requests asylum for the MRTA terrorists. On 3 March, President Fujimori travels to Cuba and meets with President Fidel

Castro to request asylum for the 14 MRTA terrorists. Castro states in writing that he does not condone the MRTA actions, but he is willing to receive them in his country.

Between 4-5 March 1997, the ninth and tenth rounds of negotiations are held between Palermo and the MRTA. For Palermo, it is evident that the MRTA is not prepared to negotiate any of their original demands, nor did they expect the crisis to go on for so long. On 6 March 1997, the MRTA terrorists suspect that a tunnel is being dug under the residence; construction noises are heard under the residence and fresh cracks on the floor of the living room begin to show. The PNP General Tomás Castillo Meza denies any knowledge of a tunnel when asked by the terrorists to inspect the floor⁴⁰. Negotiations between MRTA and the spokesperson are immediately stopped. Fujimori admits that he is considering all possible military options to solve the crisis, including airborne assaults as well as the use of tanks. Local newspapers release pictures of government vehicles removing dirt from the perimeter site. These pictures are broadcasted over national television for everyone to see, including the MRTA terrorists inside the residence.

On 9 March 1997, the MRTA is willing to begin negotiations once again. From the Vatican Pope John Paul II requests that the MRTA release all 72 hostages. During the next several days tensions rise inside the residence and, Bolivian Ambassador Jorge Gumucio confronts the MRTA terrorists after being taunted and offended by them with insults about Bolivia. Gumucio's stance against Cerpa incites all the hostages to begin chanting the Peruvian and Bolivian national anthems, until Cerpa walks away from the confrontation apologizing. This confrontation marks a turning point in the hostages' morale and power struggle against their captors (personal interview with Vice Admiral (ret.) Giampietri on 22 September 2003).

On 19 March 1997, the Peruvian Army captures six gangs and 32 members from the MRTA's *Juan Santos Atahualpa Front* throughout the country. During the next several days, the Japanese vice minister returns to Tokyo and reassures that there will be

⁴⁰ It is believed that the cracks on the floor and the loud noises throughout this day were from one of the underground tunnels collapsing and trapping two miners, and workers using electric machinery to rescue the trapped miners. The mining group responsible for building the tunnels came to be known as "Los Topos del Silencio" (trans. "The Silent Moles"), and grew to almost 60 personnel by the end of the project (Chávez López, 1998, p. 171).

a quick resolution to the crisis soon. Later in the week, the MRTA announces that they will accept asylum in Cuba. Also during that week, military units discover a shipment of arms destined for the MRTA's *Juan Santos Atahualpa Front* as it entered the country across the Ecuadorian border. The shipment included AK-47 assault rifles, grenade launchers, rockets and machine guns.

On 28 March 1997, Jesuit priest Juan Julio Wicht conducts a Good Friday service; several of the MRTA terrorists attend. By the next morning, Néstor Cerpa paralyzes all negotiations, insisting on the release of MRTA prisoners. That day Francisco Tudela and Morihisa Aoki are briefly seen through one of the windows of the residence. Once again on 30 March, Pope John Paul II requests that the MRTA release all 72 hostages. Fujimori insists that he will not negotiate with the MRTA if they continue to insist on the release of the MRTA prisoners.

On 03 April 1997, an International Red Cross medical team enters the residence with a portable MRI machine to check on the condition of several hostages. Several days later, Fujimori visits Bolivian President Gonzalo Sánchez de Lozada in Bolivia. In a press conference in Santa Cruz, President Fujimori states that a military operation will be the last resort in the resolution of the crisis. On 14 April, news personnel are told to move their perimeter back approximately 10 meters from their original locations. President Fujimori later meets with Monsignor Cipriani for 4 hours to discuss the present condition of the hostages.

On 16 April 1997, one of the hostages establishes a conversation with a family member by using a megaphone from inside the residence. Later that day, International Red Cross member Jean Pierre Schaerer is kicked out of the country for aiding the MRTA terrorists. The next morning, Cuban Minister of Foreign Affairs Roberto Robaina, meets with Japanese Prime Minister Ryutaro Hashimoto in Tokyo and offers once again his cooperation. Vice Admiral (ret.) Giampietri sends a message stating that the hostages are seriously considering an escape plan. The S.I.N. replied with a message to stay calm and not try anything; that the crisis would be over soon. During the mass held by Juan Julio Wicht, the priest calls the MRTA terrorists "...brothers, we are all sons of God, we are all Peruvians" (Wicht, 1998, p. 216).

On 18 April 1997, in celebration of Juan Julio Wicht's birthday, the MRTA members stand at attention and propose a wine toast for the priest. Wicht recognizes that the terrorists have truly made a connection with him, and he shakes each of their hands reassuring them that God will have the final say. The following morning, the Minister of Interior and the PNP chief resign in protest against a military intervention to rescue the hostages.

On 21 April 1997, Domingo Palermo walks out of Congress and insists that the negotiations are still ongoing. Vice Admiral (ret.) Giampietri is sending out over 80 messages daily, detailing everything being done by the terrorists. He informs some of the hostages of the impending rescue, telling them to dress in light colored clothing to help the rescue force identify them.

On 22 April 1997 at 1420 hours, 140 commandos from the Peruvian Army and Marine force occupied positions in underground tunnels, awaiting orders to commence the assault. Thirteen MRTA terrorists were downstairs starting their daily soccer game. One MRTA terrorist was still upstairs as a guard; five were downstairs watching the game, while the other eight were playing. At 1514 hours, Vice Admiral (ret.) Giampietri sent out the code word "*Mary está enferma*" (trans. "*Mary is sick*") through his radio transmitter planted inside the guitar case given to him by the International Red Cross, signaling that all the pre-conditions had been met and to start the hostage rescue. Twenty sniper commandos assumed their positions along the rooftops surrounding the residence waiting for the authority to shoot. Immediately afterwards, a news agency helicopter flies over the residence, almost compromising the whole operation.

At 1523 hours, three simultaneous charges blow the floor of the living room, dining room, and the kitchen of the Japanese residence, killing immediately four terrorists who were playing soccer and injuring several others. The 140 commandos emerged from five different tunnels along the residence grounds and stormed the building, killing the other 10 terrorists. Two commandos also die during the rescue: Colonel Juan Valer and Captain Raúl Jiménez. The operation lasts 35 minutes and is considered a complete success and praised worldwide.

C. ANALYSIS

At the time of the hostage crisis there were three military units in Peru trained in hostage rescue missions: the Navy Special Operations Force (FOEs), the Marine Unidad Especial de Combate (UEC, trans. Special Combat Unit), and the PNP's Sub-Unidad de Acciones Tácticas (SUAT, trans. Special Tactics Sub-unit). Most members of these units had participated previously in counterterrorist exchange programs with the U.S. and Israel, and had combat experience against the Shining Path and during the Ecuador / Peru⁴¹ conflict. Individually, these units could not handle a target of such magnitude due to shortages of personnel or equipment. The original idea was to establish a composite unit of UEC and FOEs, with the PNP and SUAT acting as cordon security. It was General Hermosa Rios, Chairman of the Joint Chiefs of Staff of Peru, who introduced the idea of using the Army commandos to participate in the operation. Eventually, General Hermosa Rios gave the directive to establish a joint unit composed mainly of officers from the Army commandos and Marines from the UEC. The FOES participation was limited to logistical support with explosives and assault equipment.

The U.S., Great Britain, and Israel offered help by sending representatives from their respective counterterrorist units as advisors, but this help was quickly turned down by President Fujimori. Holding to his Japanese heritage and beliefs, he asserted that humiliation was already bad enough with 14 terrorists holding hostage some of the most important Peruvian government officials and dignitaries; asking another country for assistance would have just made it a bigger embarrassment for Peru. Eventually, the advisors were allowed to stay in country to provide technical and tactical assistance in an advisory role.

⁴¹ A longstanding territorial dispute between Ecuador and Peru erupted in fighting on January 26, 1995, in the remote, rugged jungle mountains of the Cordillera del Condor, where a stretch of border had never been clearly marked and where deposits of gold, uranium, and oil supposedly lay. Peru claimed that the approximately 1,000-mile border between the two countries had been set by the 1942 Rio de Janeiro Protocol, which had confirmed its victory over Ecuador in a 10-day war in 1941 over territory. But Ecuador declared the protocol null in 1960, before the last 48 miles of the border had been marked. Vowing to enforce Peru's claim to the 48-mile stretch, President Alberto Fujimori (1938-) sent troops and warplanes into the region (between the Santiago and Zamora rivers); then Ecuador's president Sixto Duran Ballen (1922-) attempted to negotiate a peace. Each side accused the other of being the aggressor and deployed naval ships along their coasts. Finally, a cease-fire and truce took effect on March 1, 1995, after tense peace talks, calling for demilitarization of the disputed jungle border. Peru reported losing several warplanes and almost 50 soldiers; Ecuador's official toll was about 30 dead and 300 wounded, but the casualties on both sides most likely were greater. On October 26, 1998, the two countries signed a peace treaty defining the 48-mile stretch of border, creating a committee to resolve boundary issues peacefully, and setting down terms for bilateral trade and navigation rights" (Information retrieved from <http://www.onwar.com/aced/nation/pat/peru/fecuadorperu1995.htm> on 2 Nov 03).

1. Phase I: Planning, Preparation, and Rehearsals

In Operation CHAVIN DE HUANTAR, the rescue force had 126 days to prepare, and they used this time to the fullest. Immediately following the takeover, the PNP developed an emergency assault plan in conjunction with the SUAT, and remained on site with this task for several days, until the designated unit was properly assembled and given the designation of “rescue force”. The following two weeks were chaotic for all military and police units responsible for the security of the residence; the shortage of personnel, equipment, and intelligence delayed the proper assignment of duties and responsibilities for the rescue forces. In the meantime, the PNP and SUAT forces scrambled to acquire whatever resources they had to maintain an emergency rescue capability. Some frustrated PNP commanders that impatiently wanted to end the crisis, developed a myriad of hastily assembled rescue plans that included rocket propelled grenades, explosives, and less-than-lethal ammunition. Eventually order was established with Gen. Hermosa Ríos as the task force commander, Vladimiro Montesinos in charge of all intelligence operations, and President Fujimori as the commander in chief of all forces.

Immediately after we found out that our parents were inside, we parked our vehicle in front of the residency and slept there for the next two weeks. Initially we were very worried because we thought the police would go in any minute and massacre everyone because of their lack of expertise in these types of situations. They wanted to go in with bazookas and blow everything up. Little by little, we managed to persuade them against an emergency assault (Personal interview with LCDR Sergio Giampietri, Peruvian Navy, on 20 March 2004).

Preparations to construct a replica of the residence began in early January. Forty civilian workers were contracted to begin construction of a full size mock up at the Peruvian Army’s Commando School in El Chorrillo. Initially, the site was meant to replicate only the first floor of the residence, and it was to be made of bricks. As the siege was prolonged, a mock up of the second story of the residence was built side by side to the first floor mock up site. As time went on, the construction continued with a second floor added on top of this latest mock up of the second floor layout, turning this

location into a two-story site. Eventually, tunnels were built underneath the site, allowing for the realistic and full-blown live fire rehearsals for the assault force and the breaching parties.

The initial and only blueprints available for the Japanese residence did not coincide with the actual construction of the residence; structural modifications had been made from its original construction. Eventually, a set of updated sketches was sent via fax from Japan, enabling the mockup construction to be identical to the actual residence.

The master breacher for the operation, UEC CDR Carlos Tello, conducted numerous tests and rehearsals with different types of explosive charges in order to perfect the type of charge to be used during the initial entry into the residence. The main concern was to have enough force to make a hole through the floor of the residency and kill as many terrorists as possible, without having the second story collapse, bringing the whole structure to the ground and killing or injuring the hostages⁴². He had to improvise and devise a series of shape charges made out of plastic explosives and shrapnel inside buckets, which were then attached upside down from inside the tunnels to the ground floor of the residence.

I knew the advisors were there from other countries ready to give us the appropriate explosives I needed to make the explosions work. I was not allowed to ask for any materials; it was so frustrating, knowing I had to improvise with what I had instead of using the right charges (Personal interview with CDR Carlos Tello, Peruvian Marines, on 24 September 2003).

At one point during testing, CDR Tello complained to President Fujimori about the amount of smoke that remained inside the structure after each shot because of the type of explosives he was using, trying to sway the President to request help from U.S. advisors. President Fujimori simply told CDR Tello to do the best he could with what he

⁴² Using too large an explosive charge will harm hostages as was the case when Egypt's Force 777 attempted to storm Egyptair flight 648, a Boeing 737, which was hijacked to Malta. Force 777 decided to blow a hole in the roof to gain entry into the aircraft. They also decided that the charge should be large enough to stun the terrorists. However, the explosion was so huge that six rows of seats were ripped loose and nearly twenty passengers were killed. This mistake, in addition to numerous others, ultimately led to the deaths of 57 hostages (Information retrieved from specwarnet.net/world/ct.htm, on 20 January 2004).

had, that this operation was a problem for Peru to solve without any outside help. The morning of the operation, President Fujimori requested CDR Tello to double the charge to ensure all members of the MRTA would be neutralized from the initial explosion, but CDR Tello adamantly refused explaining that if he did, the whole residence would collapse (Personal interview with CDR Carlos Tello, Peruvian Marines, on 24 September 2003).

2. Phase II: Approach and Assault

One of the most fascinating aspects of Operation CHAVIN DE HUANTAR was the ingenious approach to the target site. The MRTA terrorists never imagined that they would be overtaken from underground. Throughout the four months of planning and preparation, nine tunnels were dug underneath the residence in an astonishing feat of engineering; the tunnels started from rented government homes across from the main street of the residence, under the streets, under the perimeter wall, through the garden area, and underneath the actual residence. These tunnels not only provided an excellent way of infiltrating the target area undetected, but also provided secured areas to conduct surveillance, reconnaissance, and last minute planning. Two persons could fit abreast inside the tunnels; they were well ventilated, had proper lighting, and padded floors to eliminate noise. The tunnels were connected by three tactical operating centers, with communications equipment, planning tables and charts, and a unique alarm system based on red lights that would light up signaling that all pre-conditions on the target were met.

On execution day, all 140 members of the assault force were ordered to enter the tunnels and assume their respective positions. They proceeded to do this three times until all the pre-established conditions were met to conduct the assault, the main one being at least 13 MRTA members downstairs in one location, preferably in the dining area, so as to kill as many of them as possible with an explosive charge.

Once 13 of the MRTA terrorists were located on the first floor, Vice Admiral (ret.) Giampietri gave the code signal and opened the entrance door latch to the upstairs courtyard. At that time, Gen. Hermosa Rios called Vladimiro Montesinos and informed him that the assault force was ready. Montesinos called Fujimori over the phone and in turn informed him of the status on the target. Fujimori proceeded to give the go ahead. At 1521 hours, the assault force began a five-second countdown that would signal the

detonation of three explosive charges underneath the residence. Immediately following the explosions, the area was flooded by Army commandos and UEC Marines from all directions; special teams with specific areas of responsibilities divided the target into nine areas according to their respective breaching and coordination points.

Within minutes, the Japanese residence was under the control of 140 commandos from the rescue force. A lone terrorist that had barricaded himself on the second story held his position and fought off Army commandos for another 30 minutes or so until two commandos came down from the rooftop with a roof demolitions charge and finally neutralized him. A sniper-observer team from across the street informed the two commandos where to place the charge via radio communications in order to kill this last remaining MRTA terrorist. Once the target was secured, 25 members of the rescue force lay injured, two of them had been killed, and one hostage (Carlos Giusti) had died from a heart attack because of blood loss from a bullet wound that severed the femoral artery on his right leg.

3. Phase III: Post Assault

President Fujimori immediately took charge of the situation by conducting a walk through the target area as soon as the assault was over and during the following days for a live television audience. He praised the Peruvian armed forces publicly by singing the Peruvian national anthem with them on the residence's grounds immediately after the rescue. Nevertheless, serious political repercussions have continued to occur several years after the rescue mainly because of investigations conducted by a through a *Comisión de la Verdad* (trans. Truth Commission) responding to allegations of assassinations inside the target. Some of these allegations have been instigated by leftist movements within Peru, in an effort to extradite President Fujimori and bring him to trial for his relation with intelligence chief Vladimiro Montesinos, and alleged ties to drug trafficking, extortion, money laundering, and bribery of government officials. The Truth Commission's main charge is that President Fujimori ordered the armed forces to enter and assassinate all MRTA terrorists. These accusations have only weakened the Peruvian military and the prestige of its special operations forces after this textbook rescue. Most members of the assault force have been taken to trial, facing charges of assassination and premeditated murder. Obviously, the commission does not recognize the in-extremis

nature of these types of operations⁴³. This is why it is imperative to contain the crisis area from any outside intervention until the rescue force has done its job, to include positive control of all evidence retrieved from the area by government authorities.

In a hostage rescue operation, you must let the professionals do what they do best—to rescue the hostages. If you stop to search and handcuff a terrorist, 30 hostages will die. The Truth Commission has gone as far as uncovering the forensic analysis on the MRTA corpses, to study the bullet locations and the number of rounds fired into each body, to try to prove the MRTA terrorists were assassinated. They argue that since the bodies have well placed shot groups in the chest and forehead areas, that the terrorists must have been assassinated. Their conclusions only prove the excellent marksmanship and firing discipline of the Peruvian Special Forces.

D. PRINCIPLES FOR HOSTAGE RESCUE OPERATIONS

1. Intelligence

The most critical factor for the success of Operation CHAVIN DE HUANTAR was the intelligence gathering operations. This operation is unique in that there was a hostage inside providing real time information through two-way communications. From the very early stages of mission development, the rescue force and their planning cells had the upper hand on the terrorists. Army Commander Roberto Fernández had kept his beeper from the MRTA terrorists during their initial shakedown, and immediately linked up with Vice Admiral (ret.) Giampietri to try to send out his beeper number to the PNP forces. They began speaking into every artifact that came in to the residence from the International Red Cross, in hopes that some would be “bugged” with listening devices. Once the S.I.N. had registered the beeper’s number, they signaled Giampietri by playing “La Cucaracha”⁴⁴ during the early morning loudspeaker propaganda. From that point on, Vice Admiral (ret.) Giampietri provided daily intelligence updates all the way up to hit

⁴³ Some of the members I spoke to while in Lima have been released from the military and cannot get a job anywhere in Peru due to the outcomes from the *Truth Commission’s* investigations.

⁴⁴ This was the prearranged signal between Vice Admiral Giampietri and the S.I.N. For two days, Vice Admiral Giampietri went around the residence talking into every item that had been brought in into the residence from the International Red Cross, in hopes that someone would be listening and could establish communications with the hostages. “*I would say the number of the beeper and then I would mention that if they [S.I.N.] were listening and had copied the number to respond by playing “La Cucaracha” after the Peruvian National Anthem the following morning through the loud speakers*” (Personnel Interview with Vice Admiral (ret.) Giampietri, 23 September 2003).

time, allowing the rescue element to have complete details of the intelligence picture. This unprecedented open line of communication also provided a lifeline to the hostages that kept their morale and spirits up throughout the crisis, by knowing that a rescue plan was being developed. In addition to the electronic communications, the hostages established a back up plan to communicate with the rescue force through a system of signals with a towel through a bathroom window. They would receive a message through the beeper and respond with a towel and a thumbs up or down for yes or no (Personal Interview with Vice Admiral (ret.) Giampietri, 23 September 2003).

The S.I.N. (National Intelligence Service) utilized HUMINT (Human Intelligence) assets and deployed these in and around the residence in order to look for the MRTA members or collaborators. They also created electronic interference throughout a three-mile radius around the residence, preventing cellular phone communications in the area or in and out of the residence. Four 2-men sniper-observer teams were immediately dispatched from the SUAT and these were eventually augmented with personnel from the UEC. These teams provided constant monitoring of the site as well as surgical fires. The Peruvian Army rented five homes along the southern sector of the residence, which were used for command and control, reconnaissance and surveillance, and as troop holding areas during the last days of the siege. “We knew it was indispensable to know what the terrorists were thinking and at the same time to hide our intentions” (Hermosa Ríos, 1997, p.144). On multiple occasions, intelligence personnel used periscopes and listening devices from inside the tunnels, to gather critical intelligence on the terrorists, the mines and booby traps used in and around the residence, possible breach points, and escape routes for after the assault.

2 Surprise

The MRTA terrorists never expected an assault in broad daylight hours, much less coming from underground. The only possible way they thought a rescue operation could be mounted was by using helicopters. They had mined and booby-trapped the surrounding grounds of the residence, so they were confident that any rescue attempt would have to come from the air. The explosive entry into the residence gave the assault force maximum surprise. The time of the day, the ongoing negotiations, the covert nature of the approach, and the real time intelligence being fed to the rescue force, all

contributed to the total success of the surprise factor. Thirteen terrorists were in the dining area of the residence during the detonation of the explosive charges. It is believed that only four terrorists died because of the initial blast. But this is due to the fact that a helicopter from a news agency was flying over the target area approximately 20 seconds before the blast; when the terrorists heard the helicopter, they stopped playing soccer and moved to the windows to look, thinking a rescue attempt was on its way. Otherwise, many more terrorists would have died during the initial explosion.

The shock effect of the initial breach gave the assault force the precious seconds needed for a quick entry into the target area, taking advantage of the shock and chaos induced by the explosions. The principle of surprise allowed the assault force to enter the target quickly, dominating all vulnerable points and neutralizing the threat discriminately.

In a special operations mission, the concept of speed is simple. Get to your objective as fast as possible. Any delay will expand your area of vulnerability and decrease your opportunity to achieve relative superiority (McRaven, 1995, p.19).

Immediately after the explosion, personnel in the tunnels removed the boards that were holding the remaining soil covering the openings of the tunnels, and ran outside into their respective entry sites. One team could not pull all the boards out and had to back out of the tunnel and use a different tunnel. The soldier tasked with opening the top soil, frantically scraped the dirt, roots, and boards, with his bare hands in a desperate attempt to remove the dirt covering his opening. Unable to break out of his tunnel, he had to backtrack with his whole team to another tunnel. This had been rehearsed during the contingency planning portion of the rehearsals, so the operator and his element adjusted quickly to the alternate entry point (from personal interview with Captain Alex Segura Figueroa, assault force member, Peruvian Special Forces, 24 September 2003).

3 Operator's Skills

The 140 men assault force rehearsed the operation hundreds of times, conducting live fires at the mock up site; at the same time they were kept in total isolation from the public, their families, and their loved ones. Each member of the assault force knew exactly how many steps he had to take in each room and at each different situation:

We got so good at it, and we did it so many times, that I could walk the entire house, room by room, with my eyes closed, calling out where each hostage was located (personal interview with Captain Alex Segura Figueroa, assault force member, Peruvian Special Forces, 24 September 2003).

A critical factor for the planned contingencies was the use of pre-planned support teams, not usually attached to a rescue force. Operation CHAVIN DE HUANTAR had specific teams that went in as part of the assault to provide support during the rescue: firefighters, medics, and reserve teams, all entered immediately behind the rescue force, and they were all needed and used during the assault. These teams provided critical support that it is not usually planned for as part of the assault force organization. The contingency plans to call these special teams were rehearsed as part of the mission execution and given specific code names for each special situation. Each contingency was timed during rehearsals, to ensure actual time on target did not exceed one hour.

4. Deception

Operation CHAVIN DE HUANTAR was also a textbook example of a well-coordinated deception plan at the strategic, operational, and tactical levels. President Fujimori deceived the MRTA to buy time, by leading them through an astute bargaining process with no end in site. The deception operations used by the S.I.N. and the armed services were established specifically to increase the surprise factor. Surprise was a direct result of the successful use of deception operations throughout the 126 days of the siege. The use of loudspeakers to hide the noise from the tunnel digging, the propaganda and demonstrations by the PNP and the Army, the over flights and use of undercover news personnel, all contributed to a complex and well planned deception strategy. It allowed the assault force to move into position under the residence over 30 hours prior to the operation. The Peruvian government dominated the operational security of the whole operation, to include the control of the media and the international community throughout a long and drawn out process, all while mounting the assault.

The MRTA terrorists were deceived into believing that they had the upper hand throughout all the negotiations. They were led to believe that the use of force would not be considered, especially with President Fujimori's son still inside the residence.

President Fujimori led the MRTA to believe that he would eventually concede to their demands, drawing out the negotiations process, tiring the terrorists and causing them to make critical mistakes.

E. CONCLUSION

It is important to understand the uniqueness of this case and some of the other surrounding factors that contributed to the success of the operation. Working in friendly territory, the ability and time to dig the underground tunnels, the terrorists' skill level and lack of discipline, and the willingness of other countries such as Cuba to offer asylum to the terrorists, all were contributing factors for the success of the rescue. We must consider these factors and understand that the same tactics, techniques, and procedures used for Operation CHAVIN DE HUANTAR might not work in every hostage rescue operation. Drawing out the negotiations process can also lead to a dangerous situation inside the crisis site for the hostages; if the terrorists think they are not making any progress throughout a protracted negotiations process, tensions will rise jeopardizing the security of the operation and of the hostages.

Nevertheless, Operation CHAVIN DE HUANTAR proved to be a textbook example of a hostage rescue operation utilizing the four principles for a successful rescue. Furthermore, it shows the benefits of having patience with the terrorists and waiting to conduct the rescue once the terrorists have reached their culmination point, exploiting their tactical mistakes. The Lima operation is a perfect illustration of the advantage of drawing out the negotiations process to buy time, in order to tire the terrorists and develop the best possible rescue plan to be executed at the right time.

Mission Success

Mission Failure

Time (months)

50% probability of success

Start of Crisis

2023hrs MRTA takes over the residence

20 Dec 96: 38 hostages released

22 Dec 96: 225 hostages released

MRTA releases women + elderly

MRTA makes demands

PNP fire tear gas inside residence

Miraflores Mayor escapes

Minnig begins negotiations

27 Dec 96: tunnel construction begins

SUAT snipers in place

24 Dec 96: Uruguay releases 2 MRTA prisoners

28 Dec 96: 20 hostages released

31 Dec 96: news crews inside / HUMINT. 2 more hostages released

TECHINT inserted inside residence

1 Jan 97: 7 hostages released

17 Jan 97: 1 hostage released

26 Jan 97: 1 hostage released

MRTA starts playing soccer everyday at 1500hrs

6 Jan 97: 2 way TECHINT with ADM Giampetri

27-29 Jan 97: PSYOPS + feints in front of the residence by PNP

8 Feb 97: Medical examination given to hostages, intelligence collected

February: Ten Meetings with Guarantor Commission

3 Mar 97: Castro will receive MRTA

MRTA might find a compromise

6 Mar 97: Tunnel compromised

13 Mar 97: Gumucio's stance

29 Mar 97: Cerpa stops all negotiations

19 Apr 97: Minister of Interior and PNP Chief resign

22 Apr 97: Rescue Operation CHAVIN DE HUANTAR

HIT

Intelligence, Surprise + Deception, Operator's Skill for Hostage Taker

Intelligence, Surprise + Deception, Operator's Skill for Rescue Force

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IV. TRUST AND INFLUENCE DURING THE HOSTAGE CRISIS

Trust and influence⁴⁵ involve commitment and risk. This chapter examines the types of trust commitments and the risks of trusting when expectations are not fulfilled as well as targets of trust during the hostage rescue in Lima, Peru. This chapter also explores the nature of influence, focusing on the role of networks in influence during the hostage crisis.

A. TRUST AND INFLUENCE DURING OPERATION CHAVIN DE HUANTAR

Throughout the 126 days of the crisis, there were 10 certified negotiations sessions between the MRTA terrorists and an officially designated Guarantor Commission. The Guarantor Commission was established on 15 January 1997, and it was composed of five members: Anthony Vincent, Monsignor Cipriani, Domingo Palermo, Michel Minnig, and Terusuke Terada, a designated observer from the Japanese government.

B. NETWORK PLAYERS

During the course of the hostage crisis, five main players emerged that had a direct impact throughout the negotiations process with the MRTA and the outcome of the operation: the government of Peru; the Guarantor Commission designated by President Fujimori; the government of Japan; the international community; and finally the International Red Cross. The government of Peru, represented by President Fujimori and his spokesperson Domingo Palermo, had the primary responsibility of the safe return of all hostages. The Guarantor Commission's primary responsibility was the direct negotiations link between the MRTA and every other entity outside of the Japanese residence. The government of Japan's responsibility was to assist the government of Peru in the safe return of all hostages (a large majority of the hostages were Japanese citizens). The international community's primary responsibility was to provide support to the government of Peru in the safe resolution to the crisis. The International Red

⁴⁵ Webster's dictionary defines trust as reliance on the integrity, strength, ability, surety, etc. of a person or thing; confidence. It also defines influence as the capacity or power of persons or things to produce effects on others by intangible or indirect means; the action or process of producing such effects; a person or thing that exerts influence; the power to persuade or obtain advantages resulting from one's status, wealth, position, etc. (Dr. Dorothy Denning, Trust-Influence-Networks Course, Naval Postgraduate School, 2003).

Cross' role was to provide humanitarian aid throughout the crisis, while remaining an unbiased third party. The MRTA, as described above, was the terrorist organization that sought demands from the Peruvian government in exchange for the safe return of the hostages in the residence. The relationships and networks that evolved between these players over the 126-day crisis led to its successful conclusion. The following diagram illustrates the relationships between the players influencing the MRTA:

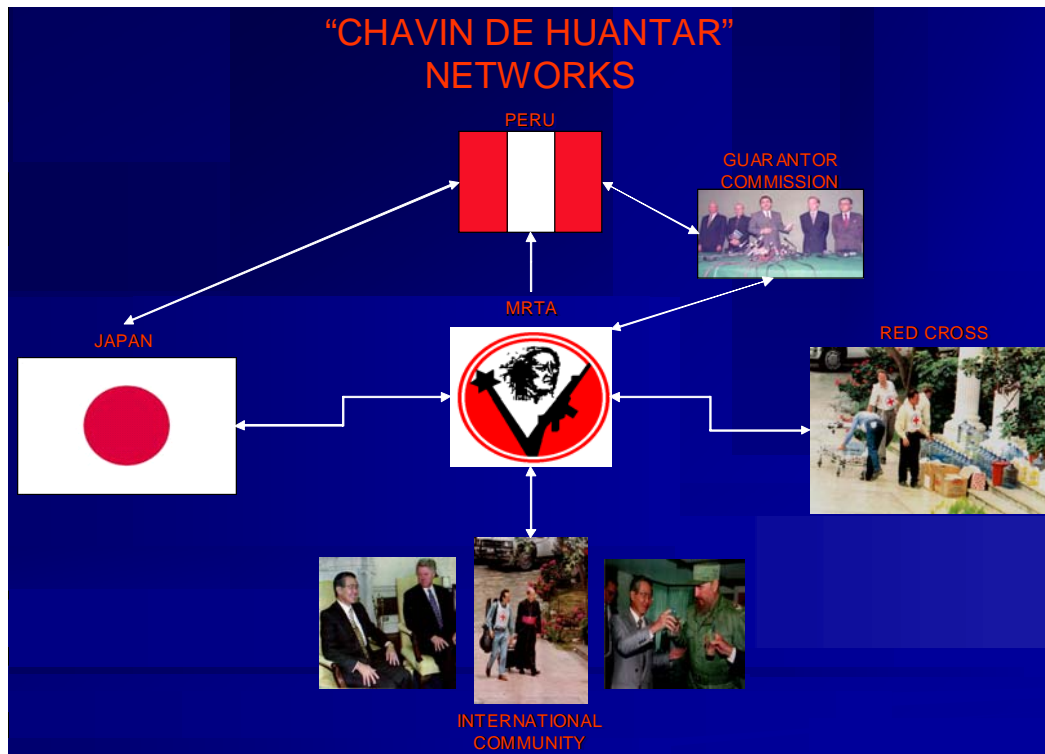


Figure 12. Author's Representation of the Networks in Operation CHAVIN DE HUANTAR

By using Piotr Sztompka's trust and influence model and conducting a process trace, I will explain the links of the relationships between the players within the case study. Examining the details of the negotiations throughout the crisis (see case study Chapter III), I will establish that trust and influence played a critical role in the outcome. Specifically, I will investigate the three types of commitment Sztompka says invoke the trust of others within a network: *anticipatory*, *responsive*, and *evocative* trust; and evaluate their effects on Operation CHAVIN DE HUANTAR networks. The following diagram illustrates the components of the trust/influence model:

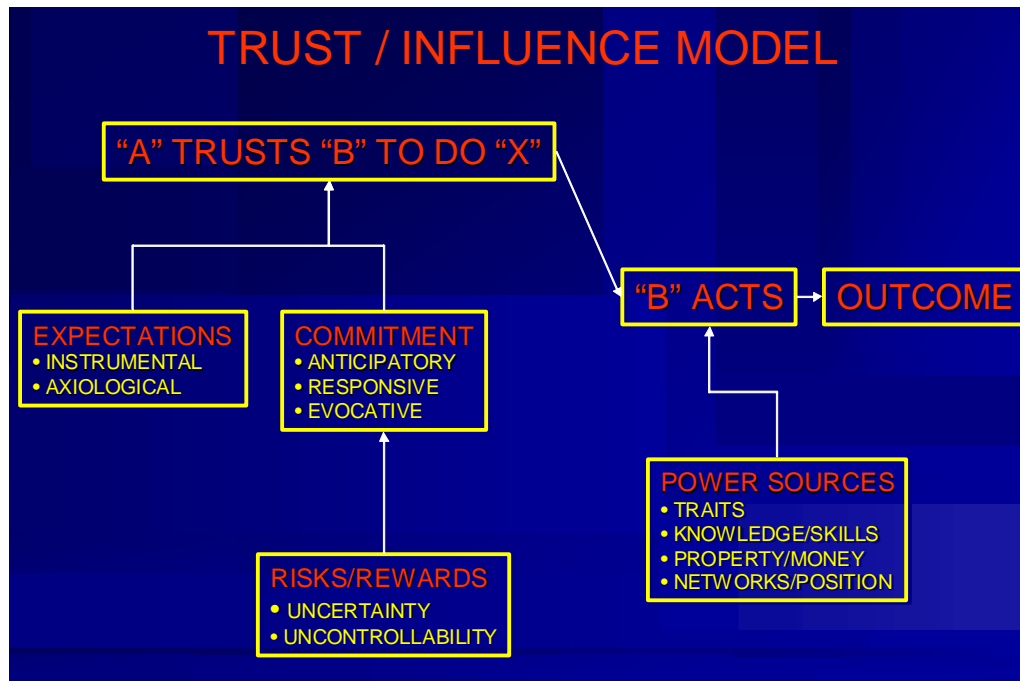


Figure 13. Author's Representation of Sztompka's Trust / Influence Model

The model can be used as a tool to extract the trust factors that were at work in the case study. We can look at the trust and influence model from the terrorists' perspective, utilizing the following variables: "A" is the MRTA terrorists; "B" is Peru and the international community, and "X" is the action of carrying out the MRTA requests and demands. In order for "A" to trust "B" there must be some sort of commitment by "B"; commitment involves future exercise of power by a trusted entity. This commitment can take the form of anticipatory, responsive or evocative trust or any combination of the three. Each commitment made by "B" contains inherent risk/reward consequences. These consequences must be actively managed by "B" in order to successfully deliver "X". The strength of the commitment is proportional to the level of risk incurred. Also in conjunction with the commitment of "B" is the expectation that "A" has of "B's" actions. These expectations can be instrumental (capability-based) or axiological (morally based). If expectations are not met, outcomes are affected and failure may result.

After "A" has decided to trust "B" to do "X", "B's" ability to act is predicated on the power he exerts over the situation. As the model indicates, he can pull this power

from several sources including traits, knowledge/skills, property/money, and/or network position. Does “B” have a requisite amount of these to accomplish “X”? If it is perceived that he does, then the chances of achieving the desired outcome are increased from the perspective of “A”.

1. Anticipatory Trust

Anticipatory trust is defined as a routine, default behavior with no clear obligation for trusted entity. “When I act toward others because I believe that, the actions that they carry out anyway will be favorable to my interests, needs, and expectations” (Denning, 2004, SO-4106) Examples of this kind of trust are the trust an individual puts in an airline to bring him/her home safely or the trust put in a computer firm because of its reliability. From the case study chronology (see Chapter III), the MRTA placed anticipatory trust on Michel Minnig, the senior International Red Cross representative (and a hostage), because of his position with the International Red Cross. The MRTA had axiological expectations that Minnig would morally base intentions and not choose sides in the crisis. Because of this, the MRTA thought they could manage the risk and perhaps reap rewards for their early concessions. Minnig’s traits as an experienced Red Cross worker and his senior position in the organization gave him both the credibility and expertise to manage a crisis. Consequently, Minnig immediately began to negotiate the release of all the women and elderly people in the first two hours of the crisis. By his actions he not only got hostages released to government (reduce risk), but he reduced the number of hostages the MRTA had to control (a reward).

2. Responsive Trust

Responsive trust is defined as “the act of entrusting some valuable object to someone else with his or her consent...” (Stompka, 1999, p. 27). An example of this kind of trust is entrusting someone with the care of your child for a period of time. From the case study chronology, the Uruguayan government released two MRTA terrorists from one of their prisons in exchange for Uruguay’s ambassador to Peru. The MRTA had instrumental expectations of the Uruguayan government to be capable of releasing the prisoners. The MRTA effectively managed the risk to themselves by holding on to the ambassador until the prisoners were released in Uruguay. Once the MRTA was convinced to trust Uruguay to release the prisoners, the Uruguayan government used their

position as sovereign head to make the release of the prisoners happen. This type of trust was issued back and forth many times throughout the negotiations process.

3. Evocative Trust

Evocative trust is defined as a reciprocation of trust, "...act on the belief that the other person will reciprocate with trust towards ourselves" (Stompka, 1999, p. 28). An example of this trust is a mother allowing her daughter to stay out late in the hope that she will return her trust responsibly. From the case study chronology, there are two good examples of this type of trust between both the terrorists and the Japanese ambassador, and between Fujimori and the international community. The Japanese ambassador publicly apologized for the situation blaming himself for the crisis. This followed Japanese trust culture that avoids confrontation and readily accepts moral obligations. The MRTA had axiological expectations that all the Japanese would behave this way in the crisis consistent with their culture, and the ambassador's actions reinforced that. Because of his position and cultural traits, the ambassador exercised the power to invoke this type of trust from the MRTA and make them believe they would be successful in their endeavor.

The other example involved two of the players outside of MRTA. Fujimori managed to gain the trust of the U.S., Russian, Japanese and Canadian governments. In addition, he secured asylum for the terrorists in Cuba from Fidel Castro in the event the crisis got to that point. The international community had instrumental expectations of Fujimori that he would successfully conclude the crisis with the assets/plan of action he had in place.

Over the course of the crisis, Fujimori's team managed to infiltrate listening devices, surveillance equipment, and even intelligence agents disguised as reporters, to evaluate the situation thoroughly, as if they were in the residence the whole time. This level of technological expertise put his team in a very advantageous position to bargain (or in this case, not to bargain) with the MRTA. Given the array of international support and the ongoing rescue planning/preparation, Fujimori wielded more than enough power to garner this trust from various international states. Throughout the crisis, Fujimori earned this type of trust from others by his personal meetings with family members,

Japanese tourists, and other international delegations. At no time did he solicit for the military intervention of another country, further showing his total control of the situation.

C. CONCLUSION

President Fujimori never negotiated with the terrorists. He never gave them the idea that he would release the prisoners they requested. Up until the day before the assault, the MRTA believed they had the upper hand when Fujimori held all the cards all along. In this case study, Fujimori manipulated trust to such an extent that he gambled everything on the success of the assault. History may show him as a genius for the successful resolution to the crisis, but a more thorough study of events may show his adversary as too trusting. Perhaps President Fujimori knew it all along.

V. DETERRENCE, COERCION, AND CRISIS MANAGEMENT DURING THE HOSTAGE CRISIS

Deterrence is concerned with persuading a potential enemy that he should in his own interest avoid certain courses of activity. There is an important difference between the intellectual skills required for carrying out a military mission and for using potential military capability to pursue a nation's objectives. A theory of deterrence would be, in effect, a theory of the skillful nonuse of military forces, and for this purpose deterrence requires something broader than military skills (Shelling, 1968, p. 9).

A. THEORY AND TERMS

Hostage crises are unique in that they involve the effective manipulation of three key elements—deterrence, coercion, and effective crisis management. This chapter explains the theory and techniques behind each, and their importance during a hostage crisis resolution. An understanding of this theory is critical to tackle the issue of effective bargaining and manipulation covered in depth in the following two chapters.

The most recent National Security Strategy document focuses on the question of deterring terrorists; it implies that we cannot continue to treat terrorists with the same deterrence model we have been using since the Cold War. In order to deter future acts of hostage taking and the states that sponsor them, we must devise and engage in a new overarching deterrence strategy that encompasses strategic, operational, and tactical goals other than our current deterrence options. This strategy must clearly send the message out to terrorists and their sponsors that the costs and risks of engaging in such actions far outweigh the benefits. It must be a credible strategy making the terrorists believe that the U.S. will use force, and it must make it clear to them that we can use that force by having the capability. In order for this strategy to work properly, it must target terrorist organizations, states that sponsor terrorists, non-state actors that support these organizations and individuals that are considering becoming a terrorist or supporter of terrorist activities.

The challenge facing policy-makers lies in using the available instruments to support deterrence in an integrated and synergistic way (Powers, 2001, p. 23).

The growing spate of hostage takings in Iraq is a desperate effort by terrorists and insurgents to gain bargaining power and sway global public opinion on the current war. This wave of terrorism is meant to test the will of the international community as well as the coalition in Iraq, and it is working in favor of the kidnappers because of the lack of resolve of most players in the coalition. The Iraqi kidnappers are not motivated by money, but by politics and the ideology of jihad (Holy War). Their intent is to shock and weaken the national will, and little by little, deter the international community from participating in the coalition. As long as private firms continue to deal with hostage takers behind the scenes, paying ransoms against our national policies, and as long as countries give in to the terrorist's demands (as in the most recent case of the Philippines withdrawing their 500 troops from Iraq), the kidnappings will continue and the insurgents will gain power.

It is possible to deter terrorists or potential terrorists and their sponsors from pursuing hostage taking as a strategy; however, deterrence will not work every time. The Cold War model of deterrence is hard to apply in unconventional warfare (UW) and against terrorism; the current model should focus on threatening and targeting terrorists and their supporters where it hurts them the most and against what they hold dear, while at the same time devaluing the hostage as a bargaining tool. We must make it so hard for terrorists to become terrorists, or to acquire weapons of mass destruction (WMD), or the materials to engage in terrorist acts, that they will eventually figure out that it is not in their best interest to continue this line of work.

Terrorists are hard to deter because they have very little to lose and have very little that they value; the odds are always in their favor. Terrorism provides “positives”—notably status, power, recruits, and psychological rewards (Davis and Jenkins, 2001, p. 5). Terrorists are usually motivated by religion or other ideology, and if they die pursuing their cause, they become martyrs and heaven waits with 72 virgins and such. Other terrorists are motivated by their organization's long-term goals, as in the case of the guerrilla terrorist (see Chapter 7 for distinctions between guerrilla and fanatic terrorists).

In order to develop a new strategy of deterring future acts of hostage taking, we must reorganize and fuse our military and intelligence communities to work in synchronization. Quick reaction forces must be staged forward closer to target areas or areas of operation outside the continental U.S., across all regions of the world in order to act and react upon real time intelligence and provide the most up to date operational preparation of the battlefield (OPB). At the same time, we also need to strengthen the capability to deter future adversaries from aggression and coercion, by increasing the capability of our forward-deployed forces and global striking power to respond rapidly to threats.

This forward presence will represent a deterrence denial force that can strike at terrorist leadership cells, command and control (C2) networks, supply and financial centers, sanctuaries / safe havens, and operations cells, all at a moment's notice. In going after these terrorist centers of gravity⁴⁶, we will undoubtedly deter other terrorists and their sponsor states. This is the focus of the new strategy.

The threats we face in the 21st Century will be multifaceted—our deterrence strategy must be as well. Just as we intend to build 'layered defenses' to deal with missile threats at different stages, we also need a strategy of "layered deterrence" in which we develop a mix of capabilities—both offensive and defensive—which can dissuade and deter a variety of emerging threats at different stages (Wolfowitz, 2001).

In order to come up with deterrence options prior to and during a hostage crisis, we must first look at two Cold War / Post Cold War models of deterrence, and how these can apply to current Global War On Terrorism (GWOT). First, we will look at the Huth's model for deterrence⁴⁷, and then we will look at the Watman and Wilkening's model of deterrence⁴⁸.

⁴⁶ Center of gravity (COG) are those characteristics, capabilities, or sources of power from which a military force derives its freedom of action, physical strength, or will to fight. At the strategic level, a COG might include an alliance or coalition, national will or public support, or national leadership's will to fight. An operational COG, on the other hand, is more tangible—for example, a powerful element of the adversary's armed forces. (Joint Pub 5-01, 2002, p. II-8).

⁴⁷ Huth, Paul K. (1988). From his book *Extended Deterrence and the Prevention of War*.

⁴⁸ Watman, Kenneth & Wilkening, Dean (1994). From their book *U.S. Regional Deterrence Strategies*

B. HUTH MODEL OF DETERRENCE

Deterrence is a policy that seeks to persuade an adversary, through the threat of military retaliation, that the costs of using military force to resolve political conflict will outweigh the benefits (Huth, 1988, p. 15).

The first aspect critical in the dynamics of a hostage siege is the ability to effectively deter an opponent. The Huth model breaks down deterrence strategy as having two crucial instruments: it must be credible and stable:

A credible deterrent depends upon whether the defender appears to possess both the military capabilities to inflict substantial costs on an attacker and the will to use those capabilities if necessary. A stable deterrent avoids both increasing the potential attacker's fears of preemptive strike and engaging the bargaining reputation of the potential attacker to such an extent that negotiations become deadlocked in stalemate (pp. 33-34).

This credibility must have capability and intention, and the stability of the attacker must be sensible to threats and to challenges of the attacker's reputation. The defender has three diplomatic options in this model: conciliatory, firm but flexible, and bullying. The defender also has three military options available: caution, tit for tat, and strength.

The Huth model defines and must have three distinct players: an *attacker* (the big bully), a *defender* (the big country with interests in the protégé), and the *protégé* (little victim). In the model, Huth defines four different types of deterrence: *direct general*, *direct immediate*, *extended general* (as in the case of Taiwan / U.S. vs. China since 1949, where long-term deterrence is based upon a non-specific potential of hostility against the protégé), and *extended immediate*. The latter being the most important because as Huth mentions, if it works here, then it works everywhere (and this is the most likely case in the future).

Decades of experience in deterrence study against the attacker give information and understanding of the attacker's ways; this is important because this increases predictability and knowledge, since we never know or understand enough information about the attacker. However, in immediate cases with limited experience, both attackers and defenders can make gross miscalculations if they do not understand one another.

There are four main assumptions with Huth's model. First, the attacker at some point must choose between using force or negotiations. Second, this decision is based upon a thorough analysis of costs and benefits, (rational actor⁴⁹). Third, the attacker searches for greater information on military and diplomacy mechanisms. Fourth, the attacker has defensive and offensive aims as minimal and maximal objectives, respectively. If he does not have a minimal objective, then give him one.

C. WATMAN AND WILKENING MODEL OF DETERRENCE

Watman & Wilkening (W & W) define deterrence as:

A larger set of strategies for influencing a country's behavior. In general, one can dissuade an opponent from acting against one's interests by offering rewards or inducements if the opponent acts according to one's wishes, or by threatening sanctions or retaliation if the opponent does not (Watman & Wilkening, p. 13).

The basis for deterrence to work, according to the Watman & Wilkening (W & W's) model, rests solely on credibility. This credibility is subdivided into two categories or dimensions—intent and capability. The adversary must believe the intent of the aggressor in order for the strategy to work; also, the adversary must believe that the aggressor has the capability to follow through with the threat effectively. Intent has two specific areas: interests and reputation. Interests a state has in another state must be demonstrated by political and economical relationships, formal defense arrangements, and military-to-military exchanges. Reputation is the state's record of past behavior (p. 58). For example, the U.S. has a reputation of being very sensitive about the number of casualties in combat, especially after the disaster in Somalia during the battle of Mogadishu.

The W & W model assumes the rational choice theory on decision making of individuals, organizations, or states, provided the actor behaves in an instrumental manner, i.e., chooses the option that maximizes the actor's expected utility.

⁴⁹ The rational actor theory implies that people make decisions based upon what is important to them; people act in order to achieve their preferences. Three things are needed to be a rational actor making rational decisions: know alternatives, evaluate consequences, and judge probability, where the most frequent error in calculation resides. Decisions are made based upon limitations in these 3 steps (how well do we know all alternatives or how well do we evaluate consequences); this is also known as bounded rationality. A person with limited insight, information, or vision, like Saddam Hussein, exists in greater bounded rationality than others.

Deterrence by denial attempts to dissuade an adversary from attacking by convincing him that he cannot accomplish his political and military objectives with the use of force or that the probability of accomplishing his political and military objectives at an acceptable cost is very low.... Deterrence by punishment attempts to dissuade an opponent from attacking by threatening to destroy or otherwise take away that which the opponent values (p. 16).

However, because individuals act in their own perceived interest through cost-benefit analysis, they can be deterred. If the status quo is negative, then gain-seeking, risk prone and aggressive behavior is likely. If the status quo is positive, then risk-adverse less aggressive behavior is likely. Both of these models have applicability in fighting terrorists, specifically those that deal with hostage taking. It is imperative that we take a new look at our intentions and capabilities and redefine the deterrence strategy for the GWOT when it comes to hostage sieges.

D. DETERRING TERRORISTS

We will direct every resource at our command—every means of diplomacy, every tool of intelligence, every instrument of law enforcement, every financial influence, and every necessary weapon of war—to the disruption and defeat of the global terror network (George W. Bush, September 20, 2001).

The single most important factor in a deterrence model for fighting the GWOT is to understand the will of the enemy as well as our own. This has always been the crux in all military operations failures involving guerrilla tactics or unconventional warfare. Kidnappers are trying to level the playing field by using unconventional techniques of terror and carrying out their threats, unable to take on U.S. forces in a conventional battle. Our resolve towards these types of situations must be steadfast.

There are three basic instruments of deterrence that we can take away from the previous Cold War models—nuclear weapons capability, understanding of each side's capability and intention in using force, and the ability to communicate with one another. The previous models work for U.S.-Soviet style conflict, but do not work against an asymmetric threat, or one that has a relentless will and drive motivated by fanaticism, religious ideology, or martyrdom. For example, when dealing with hostage takers, we must make perfectly clear that this action will ultimately incur painful costs, far more painful than the damage caused by their actions. It is almost impossible to apprehend

would be hostage takers. Nevertheless, once an organization has adopted this strategy as a means of terror, it must be hunted down and destroyed, just as the Peruvian government did with the MRTA.

The strategy for deterrence must overlap with new preemptive strategies across the full spectrum of operations in the strategic, operational and tactical environments in order to be effective in the GWOT. It must combine an aggressive defensive posture (such as the government of Peru—a committed and firm offensive posture with the capability to react quickly on time-sensitive intelligence), and a comprehensive communications and information plan that can prepare everyone before, during, and after a terrorist act. Only then can we successfully integrate a deterrence strategy capable of targeting most terrorists and their sponsors. An example of these overlapping strategies is shown in the following diagram:

Combating Terrorism				
Defending America		Defeat	Deter	Diminish
	Prevent	Intercepting potential terrorists at U.S. borders may reveal terrorist activities and operations.	Capturing terrorists at U.S. borders serves to deter future attempts.	International aid and assistance relies on a robust economy—preventing terrorism protects U.S. markets.
	Protect	Robust defenses complicate terrorist plans—may increase terrorist cell visibility as a result.	Failure to achieve desired results due to protection measures helps deter future attempts.	Well protected asset reduces chances of terrorist success—failures delegitimize terrorism over time.
	Prepare	Investigations following acts of terrorism may illuminate cells, groups, or sponsors.	Holding groups and sponsors accountable for acts of terrorism ensures costs exceed perceived benefits.	Mitigating impact of "successful" terrorist acts helps delegitimize terrorism over time.

Figure 14. Overlapping Strategies, (National War College, 2002, p. 69)

In looking at deterring would-be hostage takers, an S-2 (intelligence officer) war-game strategy must be undertaken, in other words analyzing the threat and devising a technique to hurt the terrorist where it would hurt the most. This strategy must focus on action / reaction / counter-reaction, just as an intelligence officer maps out the enemy activities in relation to friendly forces, and the strategy must revolve around all those targeted as terrorists. The following diagram describes all four-target groups and their overlapping sectors:

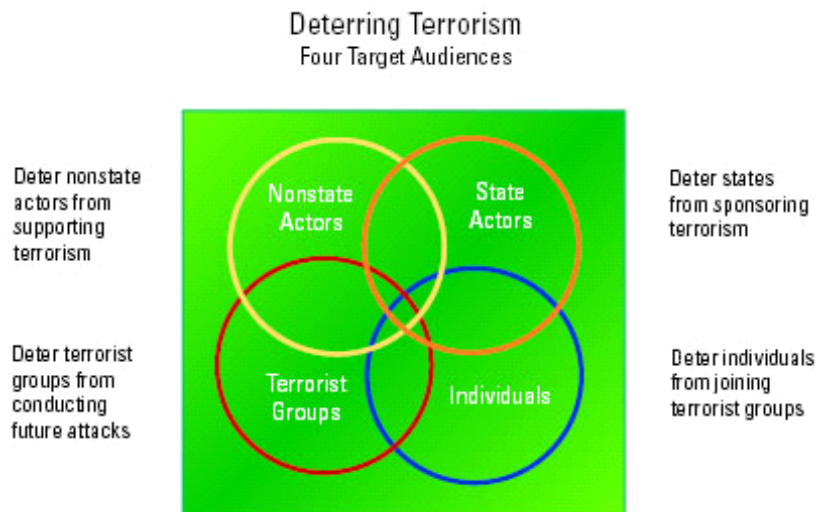


Figure 15. Targeted Audiences, (National War College, 2002, p. 40)

It is clear now, especially after 9/11, that in order to ensure security in the U.S., we must go after terrorists and those who support them abroad.

If deterrence cannot be relied upon to prevent attacks, then we must increase our efforts to detect threats, reduce our vulnerability to them, minimize the danger they pose and increase our ability to recover from any attacks that might occur (Tucker, 2002, p. 2).

For example, in the case of Chemical-Biological-Radiological-Nuclear (CBRN) weapons, the objective of deterrence strategy should not only be deterring the use of the weapon, but it should also focus on deterring the terrorist from acquiring or preparing to use CBRN weapons (Powers, 2001, p. 7). This is the counterinsurgency principle of counter-measures with counter-resources. In the current war against drugs, one of the main strategies currently in use is the targeting and confiscation of drug precursors, such as kerosene, benzene, cement, and lime, which can be used in the production of illicit narcotics. The same strategy should be applied to precursors for CBRN weapons.

The potential terrorist must be convinced that the costs of taking the action are unacceptably higher than the benefits, or that the benefits are unacceptably low. The key to deterrence is shaping the target's perception of costs, benefits, and risks associated with acting before the action occurs (p. 9).

Davis and Jenkins base deterrence strategy on influence and divide terrorists in two groups: internalists and externalists or Type A and Type B. Type A terrorists are the self-driven seekers of action, causes, or religious commitment that claim political goals but are insatiable. This group must typically be eradicated, deflected, or isolated. Type B terrorists are those with pragmatic, political world goals; they will cease their terrorist activities when they are no longer needed. They must be suppressed. Inducements are needed, or terrorism will regenerate (Davis & Jenkins, 2001, p. 11).

Davis and Jenkins give four key attributes for a counterterrorism strategy; these are necessary for the U.S. but do not work universally as in the case of the Israelis who have applied all of these and yet have not been successful. First, manifest strength and, perhaps even more important, manifest purpose and determination. Second, the relentlessness and effectiveness of actions. Third, the consistency with American values and moral validity apparent to others. Fourth, the balanced mid- and long-term strategy that includes both coercive measures and inducements (p. 25).

The current GWOT faces an ever-changing threat that focuses on retro tactics against new age technologies. The terrorist acts against the U.S. during the past 20 years should key us into creating a new deterrence strategy that can be used against all forms of terrorist actors. Strategists and military planners involved with planning and directing hostage rescue operations against terrorist organizations must have a thorough understanding of deterrence and coercion in order to know how to prolong the negotiations process to buy time for a rescue attempt.

E. COERCION STRATEGY

The second aspect critical in the dynamics of a hostage siege is the ability to coerce an opponent. In his book *Bombing to Win*, Robert A. Pape argues that a *denial* strategy is the strategy most likely to succeed when trying to coerce an opponent. This strategy must be directed towards military and not civilian vulnerabilities. In hostage rescue terms, the strategy must be directed and focused on the terrorist organization as opposed to the state that sponsors the act. He argues that governments are often willing to tolerate considerable civilian punishment to achieve important territorial aims; therefore, coercion based on punishing civilians will not succeed. He considers that the key to success in conventional coercion is not punishment but denial, which he describes

as the ability to thwart the target state's military strategy for controlling the objectives in dispute, or in other words, the threat of military failure (Pape, 1996, p. 10). *Denial* provides the critical leverage in conventional coercion and not the threat to civilians, which he calls *punishment* (p. 10).

1. Coercion by Denial Strategy

This is the most likely to succeed because it targets the opponent's military ability to achieve its territorial or other political objectives, thereby compelling concessions in order to avoid futile expenditures of further resources. Denial campaigns focus on the target state's military strategy (p. 19). Coercion by denial operates by using military means to prevent the target from attaining its political objectives or territorial gains (p. 13). The object is to wear down the opposition government's political authority gradually, and thus its ability to field military forces, rather than to destroy their forces in battle (p. 29). Denial may require stopping the opponent from either gaining or holding territory, depending on whether the threatening assailant's goal is to prevent an attack, stop an ongoing attack, or force territorial concessions (p. 10). The government of Colombia fought Pablo Escobar and his drug cartel head to head for over 20 years without any progress. Eventually the government switched strategies and commenced a full scale denial campaign against Pablo Escobar and his supporters, going after everyone and everything that had any ties to the cartel. In 1993, Pablo Escobar got sloppy and came out of hiding making a cell phone call from an apartment building in Medellin. The Colombian secret police stormed the building and shot Escobar dead within moments.

According to Pape, the key to the success of denial strategies rests in the interactions of the two sides' military strategies. The U.S. attempts to coerce North Vietnam by interdicting supply lines failed from 1965-1968 because of the North Vietnamese guerrilla war strategy; in 1972, a similar air campaign did coerce Hanoi because the North had shifted to a conventional war strategy. Coercion succeeded against the North only when they changed their strategy from guerrilla (invulnerable to air power), to conventional offensive operations (vulnerable to air power).

2. Coercion by Punishment Strategy

Robert A. Pape says that *punishment* operates by raising costs or risks to civilian population. It is not limited to hitting civilians in population centers (p. 13). Pape

considers surrender long before complete military defeat as an outstanding coercive success. Coercion fails when the coercer stops his coercive military actions prior to concessions by the target, or when the coercer imposes his demands only after complete defeat of the target. This is why punishment rarely works (p. 15). Punishment generates more public anger against the attacker than against the government. *Heavy punishment* does not produce disruptive behavior; it induces political apathy. *Light punishment* equals popular anger toward the attacker and demands reprisals (p. 25). Punishment strategies attempt to raise the costs of continued resistance. They inflict suffering on civilians by damaging the target state's economy. Blockades are indiscriminate instruments because they affect the target's economy as a whole (p. 44), as in the case of the 40-year economic blockade on Cuba.

In *coercion by nuclear punishment*, Pape says that governments are often willing to take civilian punishment to achieve important territorial aims and that no state can stand up under nuclear punishment (p. 10). Pape also says that nuclear punishment would earn the coercer a reputation of *unparalleled barbarism* and that its destructiveness overwhelms any possible resistance (pp. 20-21). However, in a hostage crisis scenario the terrorists might be holding thousands of hostages or a whole city block with a WMD. In this type of situation, nuclear punishment might be a serious consideration for an option in the form of a low yield nuclear device against the state that sponsors the terrorist organization, or against what that specific group holds dear.

3. Coercion by Risk Strategy

This is like punishment strategy; it inflicts suffering on civilians and raises the probability of suffering costs. It is the same as punishment, but gradual (p. 18). The coercer puts at risk essentially the same targets as in punishment strategies, but the key to risk strategy is to inflict civilian costs at a gradually increasing rate rather than destroying the entire target (*kill the hostage* concept). Operations are slowly escalated in intensity in order to convince the opponent that much more severe damage will follow if concessions are not made (p. 19). Punishment or risk strategies fail because outcomes of conventional coercion are determined mainly by the target state's powers of resistance (p. 21).

4. Coercion by Decapitation Strategy

This strategy strikes at key leadership and telecommunications facilities. It is partly punishment and partly denial; it is punishment if the attacker's intent is to destroy coercive control so that the effect of punishment (coup, rebellion) can work better. It is denial if it is part of an effort to produce strategic paralysis. There are three types of decapitation: *leadership*, *political* and *military*. *Leadership decapitation* is attacking specific leaders on the assumption that they are keeping the war going. This will not work because it is very hard to find and kill key individuals. In addition, because idiosyncratic wars are rare, it is not just one group of leaders who are the cause. Finally, succession is very hard to predict. This argument applies in a situation similar to Cuba with Fidel Castro; if he is ever removed from power, there will always be more like him waiting to take charge. On the other hand, some might argue that decapitation strategy can work against insurgent groups; it seems to be the case with Peru's Shining Path, after the arrest of its leader Abigail Guzman. After his capture and public mockery on national television, the organization disintegrated and most of its leadership turned itself in to the Peruvian authorities.

According to Pape, *Political decapitation* is attacking the regime's instruments of internal control, so that punishment can work, resulting in successful coup or rebellion. There are several reasons why this will not work: conflict generates loyalty to the regime; internal monitoring of the people by a regime is hard to stop; and finally, the Army is usually the key and conflict increases its loyalty to the regime. In *military decapitation*, you are attacking national command and control to induce strategic paralysis. This does not work because military operations do not require lots of command and control (C2); C2 cannot be disrupted for too long. Pre-delegation of command makes strategic paralysis difficult (pp. 80-85).

F. MAJOR OBSTACLES IN CRISIS MANAGEMENT

1. Cognitive Approach

The third aspect critical in the dynamics of a hostage siege is the ability to coerce an opponent. Lebow describes in *Cognitive Closure and Crisis Politics*, how decision-making differs considerably from the rational process. He explains how poor judgment during the decision-making process is a direct result of perceptual distortions. He uses

the psychological perspective on decision-making because of the insights it offers into the causes and effects of misperception. The two main psychological approaches he uses are *cognitive* and *motivational*. By understanding these, we can overcome or diminish major obstacles in crisis management, specifically with the decision-making process.

The first school of psychology Lebow uses is the *cognitive* approach, which emphasizes the ways in which human cognitive limitations distort decision-making. People generally try to keep their beliefs, feelings, actions, and cognitions mutually consistent (p. 102). In other words, people see what they expect to see. Robert Jervis contends that it is impossible to explain crucial foreign policy decisions without reference to policy-makers' beliefs about the world and the motives of other actors in it. These beliefs, organized as "images", shape the way in which policy-makers respond to external stimuli. Jervis describes this cognitive consistency as "*rational and irrational*" consistency. *Rational* helps us make sense of new information as it draws upon our accumulated experiences. It also provides continuity to our behavior. *Cognitive consistency* becomes *irrational* when it closes our minds to new information or different points of view. During irrational consistency, an expectation or belief is reinforced by new information that supports it; information that challenges this expectation or belief is ignored (pp. 104-105).

To the extent that a policy-maker is confident in his expectations, he is also likely to make a decision before sufficient information has been collected or evaluated. Jervis calls this *premature cognitive closure*. This leads to the *masking effect*, where in the same way that information compatible with an established belief is interpreted in terms of this belief, the development of alternative beliefs that the information might also support are inhibited.

Another way in which irrational consistency influences decision-making is by desensitizing policy-makers to the need to make value *trade-offs*. Finally, irrational consistency is manifested in the form of *post-decisional rationalization*. People seek strong justification for their behavior and rearrange their beliefs in order to lend support to their actions. Post decisional rationalization therefore makes policy-makers less responsible to the import of critical information (pp. 106-107).

2. Motivational Approach

The second school of psychology used by Lebow deals with the importance of *motivation* as a source of perceptual distortion. Janis and Mann say that decision-makers are emotional beings, not rational calculators (p. 107). In their conflict model, Janis and Mann consider a pattern of *incrementalism*, when original policy is only marginally changed in response to threatening information and then changed again when more trouble is encountered. This occurs when a policy-maker is deeply committed to his prior course of action (COA) and fears that if he deviates from it, he will fail (p. 107). If he perceives serious risks in his current policy, he will experience psychological stress. If he cannot find a better strategy, it will result in a pattern of *defensive avoidance*, characterized by efforts to avoid fear-arousing warnings⁵⁰.

Defensive avoidance can be subdivided into *procrastination*, *shifting responsibility* for the decision, and *bolstering*. In bolstering, the policy-maker has lost hope of finding a satisfactory policy option and he is unable to postpone a decision or shift the responsibility to someone else. If the policy-maker eventually finds an alternative to failure, he then looks to see if he has enough time to implement it. If he cannot find the time, his response will be one of *hypervigilance*. Hypervigilance is characterized by indiscriminate openness to all information and a corresponding failure to determine whether that information is relevant, reliable, or supportive. A decision maker under hypervigilance will likely be influenced by the will and opinions of others (p. 110). All these patterns are means of coping with psychological stress, and lead to poor decision-making, as they all have some kind of cognitive distortion.

Possible solutions to these barriers or obstacles would be to establish well-coordinated COA teams or red teams that can aggressively war-game every possible situation, ensuring the decision maker remains unbiased by the psychological factors of cognition and motivation. This is the job of a dedicated and well-coordinated staff,

50 A good example of this situation occurred with Egypt's Force 777—Egypt's counterterrorist national level unit, during a botched rescue attempt in Cyprus in 1978 against the Popular Front for the Liberation of Palestine (PFLP). The Egyptian Ministry of Defense (MOD) neglected to inform the Cyprus authorities of his plan and that Force 777 was coming. During Force 777's approach to the hijacked airplane, local police opened fire on them assuming they were reinforcements for the terrorists. After an 80 minute gun battle, fifteen Force 777 operators and Cyprus police officers lay dead on the tarmac. The Egyptian MOD was a victim of incrementalism and defensive avoidance in wanting to believe his original plan would work and by not informing local authorities of his intent.

creating as many filters as possible, cross checking every possible outcome through multiple “murder boards” and “sanity checks”. However, even with a good staff that provides filters to all these psychological barriers you can encounter *bureaucratic politics*, as in the case of Colonel (retired) Beckwith overpowering his staff with his persuasive demeanor, while developing the Iran rescue plan. *Domestic politics* will also influence and drive the decision-making in skewed ways such as President Carter under tremendous stress during the months leading up to DESERT ONE and the political, civilian, and military pressures to resolve the situation.

3. Guidelines for Success in Crisis Management

Alexander George’s *Guidelines for Success in Crisis Management* is a seven-step checklist for crisis management of war-threatening crises. Understanding these guidelines, mainly the absolute need for synchronized military/civil relationships and their constant coordination with all decision and policy makers during hostage crisis management, helps us overcome obstacles or at least diminish them:

a. Political Control of Military Options

George argues that when the military has taken control or is a big part of the crisis COA, the military leadership tends to steer or divert the COA as the plan develops. Inadvertently, the plan changes and decisions are made, based on the military plan and its restrictions and limitations. It is important to maintain military options as flexible as possible to eliminate these biases.

b. Slow Military Developments to Allow Diplomacy to Work

By giving the military free rein, and not slowing them down, we send them into harm’s way, and they will act when given the opportunity (“trigger happy”); it is best to hold forces back until the last resort or until all the options have been weighed. Once committed to the crisis site, they will most likely push for an engagement (TF Ranger in Somalia).

c. Coordinate Movement of Military Forces with Diplomatic Actions

Military movements and intervention must move in parallel steps with the civil-diplomatic strategies and plans of actions. In the invasion of Haiti, former President Carter was conducting diplomatic talks while Ranger forces waited on a carrier off the coast of Haiti and the 82nd Airborne Division was flying overhead, ready to conduct a

combat parachute jump into the country. Rumors of U.S. counterterrorist units deploying to Peru for a possible rescue attempt during the early days of the crisis, prompted MRTA members to release 225 hostages, to include all AMCITS.

d. Coordinate Diplomatic Actions and Signaling with Military Forces

Again, synchronization is the key. This must be done through CMO (civil-military operations), non-governmental agencies (NGO's), or other governmental agencies (OGA's) such as the Federal Emergency Management Agency (FEMA) as in the case of Hurricane Andrew in Homestead, Florida.

e. Do Not Threaten War

War should be the last resort. If you go in threatening war, you are not giving the defender an option or a way out. The belligerent attitude must be toned down. In a hostage rescue crisis, the tactical option should be the last resort.

f. Diplomatic and Military Options Should Signal a Preference for Negotiated Solutions

Negotiations should always be the tone of the mediators. This should be the main effort, just as a *negotiator* is the "on scene commander" at a hostage crisis site. When negotiations fail, then you send in the assault force as a last resort.

g. Diplomatic Proposals and Military Actions Should Leave the Opponent a Way Out

There must be solutions afforded by military and diplomatic means, allowing the defender a way out. If you box him in, then what is the use in negotiating when he knows it will be a loss? He must see a way out in order for the crisis to dissolve.

G. CONCLUSION

It is critical to understand how the policy maker's image of the opponent and the policy maker's general beliefs about bargaining strategy and the danger of escalation influence decisions. In addition, it is important to understand how crisis-induced stress and fatigue have a detrimental effect on the performance of decision makers and their advisers. Effective crisis management, according to Alexander George, requires policy makers to develop and employ strategies and tactics that are sensitive to both diplomatic and military considerations. The use of military force in these situations must be carefully employed as an instrument of last resort. The Somalia intervention and the

events that culminated with the battle of Mogadishu in which 18 TF Ranger personnel died, are perfect examples of how George's 7 steps were not used properly. It was evident throughout the operation that there was a massive breakdown of information between the experts in the Department of State and the civil and military leadership of the Department of Defense. After it was all over, the President and the Secretary of State admitted that they had not paid enough attention to what was going on in Somalia.

The use of SOF and counterterrorist forces should be looked at carefully, specifically in the GWOT, so as not to "burn out" these valuable assets on "hyperconventional"⁵¹ targets of opportunity; these forces are in a critical high demand and only constitute only a small percentage of our Armed Forces. The commitment of national level assets to "take down" a target or handle a crisis could have tremendous implications for our government and could influence world opinion. These forces are usually tasked with the most critical and sensitive target sets, as in the case of the ill-fated Operation EAGLE CLAW (DESERT ONE), or the raids to capture the warlord Aideed and his militia leaders in Somalia. These failures lead to political repercussions and blowback that cannot be taken lightly. Careful crisis management will help prevent some.

We can ill afford to make mistakes as a nation, causing irreparable damage to our foreign policy and reputation. Careful handling of a hostage crisis, weighing every possible option, informing all those responsible in the civilian/military leadership is crucial. The crisis manager as well as the Administration should take a hard look at the developing crisis before committing SOF or national assets as a quick fix. The risks vs. benefits of committing these forces must be weighed and war-gamed carefully between all civilian/military leaders prior to committing the military arm of the DIME (instruments of national power).

⁵¹ The term hyperconventional is used here to designate conventional targets or missions that would normally be assigned to conventional forces, but have been elevated to being executed only by SOF or national level assets, in fear of mission failure.

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VI. GAME THEORY AND THE HOSTAGE RESCUE

A. INTRODUCTION

The science of strategic thinking, known as Game Theory, is the art of outdoing an adversary, knowing that the adversary is trying to do the same to you. The strategic thinking of a hostage crisis using game theory analysis through mathematical modeling will help us represent the imperatives that are critical for success in the rescue of hostages and how these imperatives transform as a function of time. By having a thorough understanding of Game Theory and its applications in hostage rescue operations, we can increase the chances of a successful resolution to a crisis.

In their article *Terrorism and Game Theory*, authors Sandler and Arce describe six intrinsic reasons why Game Theory is an appropriate tool for examining hostage rescue operations. First, game theory captures the strategic interactions between terrorists and a targeted government, where actions are interdependent and, thus, cannot be analyzed as though one side is passive. Second, strategic interactions among rational actors, who are trying to act according to how they think their counterparts will act and react, characterize the interface among terrorists. Third, in most hostage crises, each side issues threats and promises to gain a strategic advantage. Fourth, terrorists and government abide by the underlying rationality assumption of Game Theory, where a player maximizes a goal subject to constraints. Fifth, Game Theoretic notions of bargaining are applicable to hostage negotiations and terrorist campaign-induced negotiations over demands. Sixth, uncertainty and learning in a strategic environment are relevant to all aspects of terrorism, in which the terrorists, government, or both are not completely informed (Sandler & Arce, 2003, pp. 1-2).

In order to develop an optimal solution to the problem of a hostage crisis, different aspects of Game Theory will be applied to the *Hostage Dilemma*⁵², to propose

⁵² This is the author's title given to the defined problem. I could not find any official reference to such dilemma.

alternatives and give a theoretical explanation to the best possible outcomes, as well as mapping out the best moments in time (windows of opportunity), to launch a rescue force to maximize success⁵³.

1. Problem Defined

Utilize Game Theory to develop and reinforce my thesis hypothesis of a hostage crisis biorhythm, describing the best strategy to resolve the *Hostage Dilemma*.

2. Background

The Prisoner's Dilemma is probably the best-known strategic game. It was originally formulated by mathematician Albert W. Tucker in 1950 and has since become the classic example of a "non-zero sum" game in economics, political science, evolutionary biology, and of course game theory. A "zero-sum" game is simply a win-lose game such as tic-tac-toe; for every winner, there is a loser; if I win, you lose. Non-zero sum games allow for cooperation. There are moves that benefit both players, and this is what makes these games interesting.

The Prisoner's Dilemma is a two-person variable-sum game in which each player has two strategies, confess or not confess (see Figure 16). To confess dominates not-confess for both players, even though the mutual confession outcome, which is the unique Nash⁵⁴ equilibrium in the game, is worse than the mutual no-confession (Freeman, 1997, p. 583). The key strategic factor about this game is that there are possibilities of mutual advantage, as well as conflicts of interest.

If both sides play their dominant strategy (A row, C column), thus maximizing their payoff, their outcome will be worse than if both followed the strategy of minimizing their payoff (Dixit & Nalebuff, 1991, pp. 14, 91). If we assume that both players are "rational", then we can assume they both want the minimum time in jail; each prisoner will choose his dominant strategy. During simultaneous moves, the rational decision for

⁵³ The project format followed was taken from *A First Course in Mathematical Modeling 3rd Edition* course textbook, as per Chapter 2.1 (pp. 54-59), following the guidance of Professor Frank R. Giordano, 2nd Reader for my thesis project.

⁵⁴ John F. Nash (1928-) of Princeton University, an American mathematician who did path breaking work in both noncooperative game theory (the "Nash equilibrium" is named after him) and cooperative game theory, especially on bargaining, in which axioms or assumptions are specified and a unique solution that satisfies these axioms is derived. Nash obtained his results in the early 1950's, when he was only in his 20's, after which he became mentally ill and was unable to work. Fortunately, he has made a remarkable recovery and has now resumed research (FAPP, pp. 586-587).

Prisoner #1 would be to confess (hoping for 0 years in prison payoff), and for Prisoner #2 to confess (looking also at a 0 years in prison payoff). However, if Prisoner #1 elects to confess (10 or 0 years payoff), then Prisoner #2 could get either 10 or 20 years in prison. If Prisoner #1 elects not to confess (20 or 1 years payoff), then Prisoner #2 could get either 0 or 1 year in prison.

		Prisoner #2	
		Confess	Don't Confess
Prisoner #1	Confess	10, 10	0, 20
	Don't Confess	20, 0	1, 1

Figure 16. Author's Representation of the Prisoner's Dilemma

Now, if both prisoners act "irrationally" and do not confess, each would get only 1 year in prison. This we assume to be the irrational choice since it is a worse payoff than 0 years in prison, and could possibly assure 20 years in prison for either prisoner. The two prisoners have fallen into what is known as the dominant strategy equilibrium. To confess is the dominant strategy in the Prisoner's Dilemma; when both prisoners confess, they have fallen into the dominant strategy equilibrium. This case illustrates how individuals rationally pursuing their own best interests end at an outcome, which is unfortunate for both of them (Straffin, 1993, p. 73). Confessing dominates not confessing for both players, even though not cooperating, which is the Nash equilibrium of the game, is worse for both players than the cooperative outcome (row B, column D).

Another example of two-person game of partial conflict is the Game of Chicken (see Figure 17), which leads to worse outcomes than those desired. In the Game of Chicken, each player has two strategies: to swerve to avoid collision or not to swerve and cause a collision. Neither player has a dominant strategy. The compromise outcome, (both players swerve) and disaster outcome (neither player swerves) are not Nash

Equilibria; the other two outcomes (one player swerves and the other does not) are Nash Equilibria.

		2 nd Truck	
		Swerve	Not Swerve
1 st Truck	Swerve	3, 3	2, 4
	Not Swerve	4, 2	1, 1

4 is Best
1 is Worst

Figure 17. Author's Representation of the Game of Chicken

How does the Game of Chicken differ from the Prisoner's Dilemma? Not confessing in the Prisoner's Dilemma (the crash when both players drive straight) is the worst outcome in Chicken; it is the best outcome in the Prisoner's Dilemma. In the Prisoner's Dilemma, not confessing while the other player does confess is the worst outcome for a single player. In Chicken, one player wants to drive straight while the other one swerves; neither side has a dominant strategy. The Prisoner's Dilemma has one Nash equilibrium point while the Game of Chicken has two Nash equilibrium points. The cooperative outcome in each dilemma is not a Nash equilibrium point.

B. CASE STUDY

For the purpose of this analysis, I will use Operation CHAVIN DE HUANTAR covered in Chapter III, from Lima, Peru. This operation was a complete success, and it serves as a great example to present the game theory analysis as well as the strategic decision making process for this thesis.

C. VARIABLES

If we apply the analysis of a Prisoner's Dilemma to a hostage rescue crisis, we will find that the dominant strategy equilibrium is for the rescue force to conduct an

assault and for the terrorists to kill all the hostages! Now, if cooperation and negotiations are involved through arbitration, allowing concessions to be made by both parties, the outcome will be much different.

The two players considered in the Hostage Dilemma game are the terrorists and the rescue force. The following is a list for possible strategic options (legend) to be used for the Hostage Dilemma:

From the terrorists' point of view, they have two possible moves:

A: Do Not Kill the Hostages (hostages are safe). This implies that the threats were not carried out, and that the hostages were safely released, either by the terrorists or by the rescue force.

B: Kill the Hostages (hostages die). This implies successfully carrying out the threat, resulting in the death of all the hostages.

From the rescue force's point of view, they also have two possible moves:

C: Meet the Demands (terrorists safe). This move implies giving in to the terrorists' demands, without conducting the rescue.

D: Conduct Assault (terrorists are killed). This move implies successfully conducting the rescue, killing all the terrorists and not giving in to their demands.

		The Hostage Dilemma	
		Rescue Force	
Terrorists		Meet Demands (Terrorists Safe)	Conduct Assault (Terrorists Dead)
	Don't Kill Hostages	4, 3	1, 4
	Kill Hostages	3, 1	2, 2

Figure 18. Author's Representation of the Hostage Dilemma

D. ASSUMPTIONS

At the start of the crisis, the initial tendency for both players is to negotiate because governments with or without a rescue force usually tend to want to play it safe, while the terrorists want to make their demands and hopefully have them met (Tay & Meng, 2003, p. 3). As the situation develops, the equilibrium will depend on each player's initial credibility and reputation in carrying out threats or promises. The following explains how the payoffs were assigned to each player, listed from best to worse (4 to 1):

1. Rescue Force

[4]: Don't Kill the Hostages, Conduct Assault (AD): The hostages are rescued, the terrorists are dead, and the government did not give in to any of the terrorists' demands, thus discouraging future acts of hostage taking.

[3]: Don't Kill the Hostages, Meet Demands (AC): The hostages are safe, the terrorists' demands are fulfilled, and the government gave in to the terrorists' demands, thereby encouraging future hostage takings.

[2]: Kill the Hostages, Conduct Assault (BD): The hostages are dead, the terrorists die at the hands of the rescue force, but the government did not give in to the terrorists' demands and thus discouraging future hostage takings.

[1]: Kill the Hostages, Meet Demands (BC): The hostages are dead, the terrorists' demands are fulfilled, and the government gave in to the terrorists' demands, thereby encouraging future hostage takings.

2. Terrorists

[4]: Don't Kill the Hostages, Meet Demands (AC): The terrorists' demands are fulfilled, the hostages are safe, and the terrorists live to carry out future acts of terrorism.

[3]: Kill the Hostages, Meet Demands (BC): The terrorists' demands are fulfilled, the hostages are dead, and the terrorists have established credibility for their organization. The terrorists will also die at the hands of the rescue force for not keeping their promise.

[2]: Kill the Hostages, Conduct Assault (BD): The terrorists’ demands are not fulfilled, the hostages are dead, and the terrorists die at the hands of the rescue force.

[1]: Don’t Kill the Hostages, Conduct Assault (AD): The terrorists’ demands are not fulfilled, the hostages are safe, and the terrorists die at the hands of the rescue force.

For the terrorists, their best possible payoff comes by not killing the hostages while still getting their demands met (4, 3). They do not have a dominant strategy. The rescue force on the other hand, has a dominant strategy at “D” by conducting the assault and hoping that the hostages come out alive (AD or BD). This is demonstrated by doing a flow diagram of the payoff matrix (Figure 19):

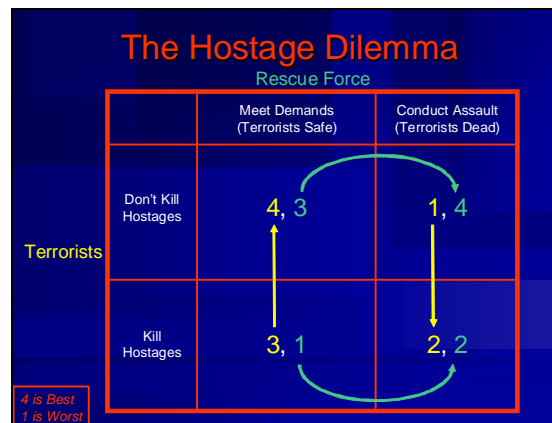


Figure 19. Author’s Representation of the Hostage Dilemma Movement Diagram

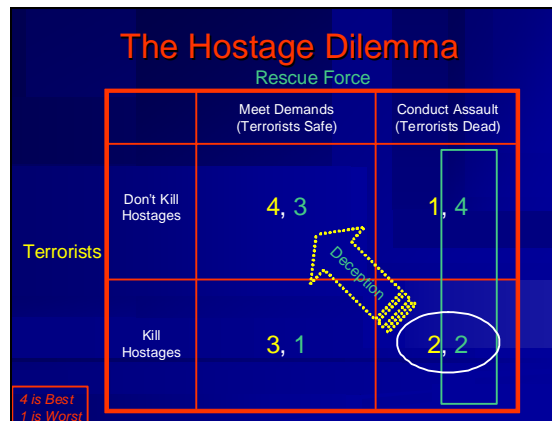


Figure 20. Author’s Representation of the Nash Equilibrium and Dominant Strategy

In this situation, if we assume that the country with the crisis at hand has a known “non-negotiations” policy towards terrorists (Peru), the terrorists have no other choice but

to kill the hostages. The rescue force will be better off by choosing to conduct an assault regardless of the terrorists' decision; the terrorists will make a decision based on this knowledge. The *Nash Equilibrium* point is (2, 2), or "conduct the assault" and "kill the hostages". This solution represents a serious problem with the idea of an equilibrium point as a solution concept for non-zero sum games. Furthermore, this is a dangerous stance to assume; during multiple runs of the same scenario, it is better to cooperate in the end than to cheat. However, most governments believe, as in the case of Peru, that by adopting this no-negotiations stance toward terrorists, they can limit the game model to a "single game model". In other words, this hard stance, coupled with a first-time successful rescue attempt, will be sufficient to deter future terrorists from taking hostages. By never having a follow up or second game, the terrorists can never "punish" the government or the rescue force.

In order to achieve an outcome that is better than (2, 2), or that the terrorists do not kill the hostages, the government and its rescue force must "cheat" the system and deceive the terrorists by making them believe that their demands will be met (see Figure 20, deception move). This is a delicate balance of an in-depth negotiations strategy, which will buy time for the rescue force to achieve maximum *Surprise*, *Intelligence*, *Operator's Skills*, and *Deception*. Assuming negotiations will take place with the terrorists, we must then look at the problem and analyze a better outcome than the one presently available without communications. For this, we move to the *Nash Arbitration Scheme* to maximize the best possible outcome for both players.

E. ANALYSIS

The challenge is to find a method of arbitrating games, which does not involve illegitimate manipulation of utilities, does take into account strategic inequalities, and has a claim to fairness. In *Game Theory and Strategy*, Straffin tells us that this reasonable arbitrated solution to a non-zero-sum game should be first, *Pareto Optimal*—there should not be another outcome that is better for both players, or better for one and equally good for the other—and second, at or above the security level for both players.

The set of pure or mixed outcomes that satisfy these two conditions is called the *negotiation set* of the game (Straffin, 1993, p. 104). If we plot the outcomes for the Hostage Dilemma in a coordinate plane, where the horizontal coordinate is the terrorist's

payoff and the vertical coordinate the rescue force's payoff we can see that we have a *Pareto Optimal*⁵⁵ dashed line between the AC and AD outcomes (Figure 21). After we have plotted the points representing the pure-strategy outcomes, mixed strategy outcomes are represented by points in the convex polygon enclosing the pure-strategy points. This polygon is called the *payoff polygon* for the game. The *Pareto Optimal* outcomes for a game can be a line segment, several line segments, or even just a single point (p. 68).

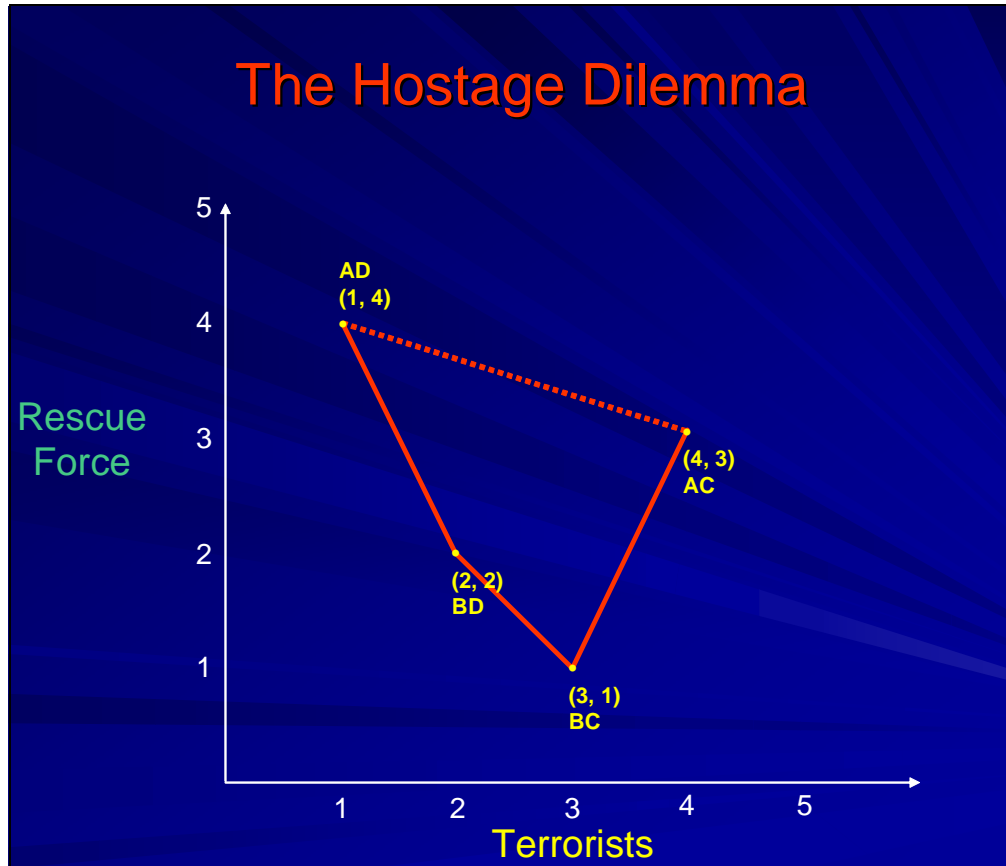


Figure 21. Author's Representation of the AD to AC is Pareto Optimal Line

In a non-zero sum game, the terrorists' optimal strategy in the terrorists' game is called the terrorists' *prudential strategy*. The value of their game is called their *security level*. This value represents the minimal outcome the terrorists can guarantee to themselves if the rescue force turns hostile and conducts the assault. The position (2, 2)

⁵⁵ About 1900 the Italian economist Vilfredo Pareto proposed that we should not accept an economic system if there is another available system that would make everyone better off (Straffin, 1993, p 67). To be acceptable as a solution to a game, an outcome should be *Pareto optimal*. An outcome is *non-Pareto optimal* (*Pareto inferior*), which would give both players a higher outcome (move Northeast on the graph), or give one player the same payoff but the other player a higher payoff (move North or move East). An outcome is *Pareto optimal* if no such other outcome exists (cannot move Northeast, North, or East from a *Pareto optimal* outcome).

in this situation becomes the *Status Quo Point*, or the intersection between the terrorist's and the rescue force's security levels; neither party can do any better than (2, 2). In a non-zero sum game, a player's *counter-prudential strategy* is his optimal response to his opponent's prudential strategy.

F. STRATEGIC MOVES IN THE HOSTAGE DILEMMA

There are essentially four strategic moves to be considered that could possibly improve one player's outcome: moving first (or allowing the other player to move first), making a threat, making a promise, and a combination of a threat and a promise. In the Game of Chicken (Figure 17), if a player moves first, he seizes the initiative, and the other player will be forced to swerve off the road. The player with the first move has the most desired outcome. If the players cannot decide who moves first, they can achieve the same effect by making a credible commitment; the problem is how to make that commitment credible to the other player. If there were a way for Truck #1 to make a commitment and then cutoff all communications with Truck #2, then Truck #2 would be forced to assume the commitment was credible and swerve off the road.

Communication can allow other attempts to make commitments besides those on the first move. By making a *threat*, a player can convince another player not to take his best possible payoff. However, in order to make the threat work, it must be harmful in some kind of way to both players to make it believable. There are games where threats will not work such as the Prisoner's Dilemma; neither player has a threat, what is needed is a *promise*. In order for a *promise* to work, it must be harmful in some kind of way to the player making the promise, and beneficial to the opposite player. Other games involve a combination of threats and promises to change the outcome. For all the strategic moves such as commitments, threats, promises, or combination of both, the major problem is making them credible. In addition, when a game is played several times, the players who can communicate can use the repeated play to try to establish credibility of their commitments, threats or promises. Repeated play also gives players who cannot communicate a chance to make implicit strategic moves (Straffin, 1993, p. 89). The most important factor to note is that it can be an advantage in a game to be able to lower some of your payoffs to achieve the best possible outcome.

1. Sensitivity Analysis of the Hostage Dilemma

The first step in doing a sensitivity analysis for the Hostage Dilemma is to look at all the possible moves for both players as follows:

We know the Nash Equilibrium point to be BD (2, 2). This game has one *Dominant Strategy* at the rescue force's "D". The desired strategy for the rescue force is for the terrorists to move to "A".

- If the terrorists move to "A", then the rescue force will move to "D".
- If the terrorists move to "B", then the rescue force will move to "D".
- If the rescue force moves to "C", then the terrorists will move to "A". This is also considered a good first move for the game, allowing the rescue force to secure a better payoff than the Nash Equilibrium point of BD.
- If the rescue force moves to "D", then the terrorists will move to "B".

Next, we look at the possible *threats* and *promises* from the rescue force's point of view for this game:

a. Threat

The rescue force wants the terrorists to move to "A". A threat would have the following form: if the terrorists move to "B", then the rescue force will move to "C". This does not satisfy the definition of a threat—the rescue force has no threat position.

b. Promise

A promise would have the following form: if the terrorists move to "A", then the rescue force moves to "C". This satisfies the definition of a promise, and it will work if the terrorists can assure in some way that they will not kill the hostages once their demands are met.

Next, we look at the *security levels* for each player:



Figure 22. Author's Representation of the Terrorist Security Level

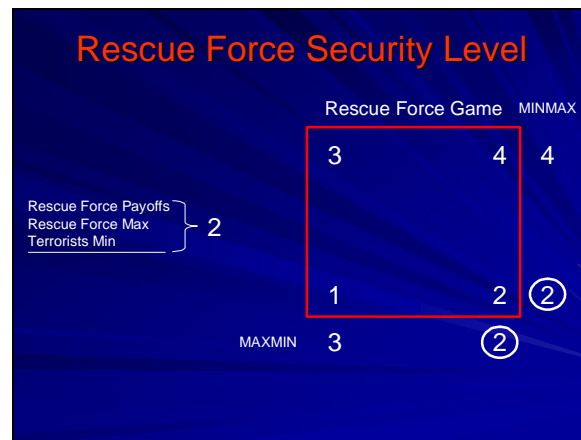


Figure 23. Author's Representation of the Rescue Force Security Level

We can see that the *Status Quo* remains at (2, 2), both players' security level. The game has a *saddle-point* at 2; the value of the game is 2 as expected. Now we move to the *geometric method* to find the *Nash Arbitration Point*. On the coordinate plane, we draw horizontal and vertical lines from the *Status Quo Point*, intersecting the *Pareto Optimal Boundary* forming a triangle. A triangle is formed by a vertical line A, a horizontal line B, and the *Pareto Optimal Boundary* line C. From the midpoint of side A, we draw a horizontal line that intersects side C. The point defined on side C is the *Nash Point*. In the case that this point lays on an extension of the *Pareto Optimal Boundary*, the nearest point on the *Boundary* itself is the *Nash Point*. From the coordinate plot in

the Hostage Dilemma (Figure 24), we can observe that the *Nash Point* is the coordinate (4, 3) AC.

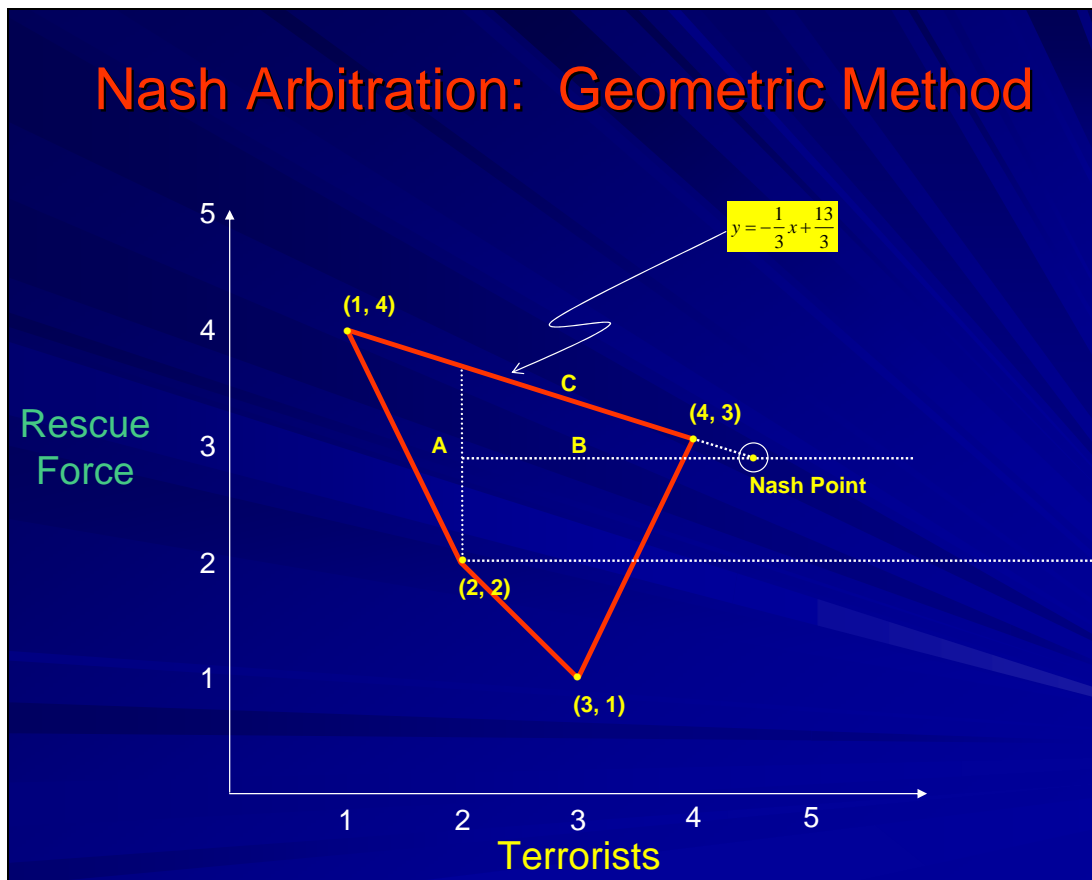


Figure 24. Author's Representation of the Nash Arbitration Geometric Method

We can confirm our data by doing the same procedure algebraically. We know that the line segment AD to AC is the *Pareto Optimal* line for the Hostage Dilemma. We can find out the equation of this line ($y=mx+b$), by using the two known payoffs of AD (1, 4) and AC (4, 3) and solving for “y”:

$$slope = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{y - y_1}{x - x_1}$$

$$= \frac{4 - 3}{1 - 4} = -\frac{1}{3}$$

$$-\frac{1}{3} = \frac{y - 4}{x - 1}$$

$$y - 4 = -\frac{1}{3}(x - 1)$$

$$y = -\frac{1}{3}x + \frac{1}{3} + 4$$

$$\boxed{y = -\frac{1}{3}x + \frac{13}{3}}$$

Now that we have the equation of the line AD to AC, we can use the coordinate plane to find the *Negotiation Set* or those points on the *Pareto Optimal Boundary* that are above the security level for both players. We consider the vertical line that represents the *Terrorist's Security Level*. We find the intersection of the terrorist's security level line with the line just found by substituting the "x" value of the *Status Quo Point*. We then go to the midpoint between the status quo point and the point just found. The y-coordinate is the y-coordinate of the *Nash Point*. We then find the x-coordinate of the *Nash Point* by substituting the Nash y-coordinate just found in the equation of a line, $y = mx + b$.

To find the intersection point on the segment C, we use the coordinates for AD (1, 4) and substitute into the equation of the line:

$$y = -\frac{1}{3}x + \frac{13}{3}$$

$$y(2) = -\frac{1}{3}(2) + \frac{13}{3}$$

$$y(2) = -\frac{2}{3} + \frac{13}{3} = \frac{11}{3} = 3.67$$

To find the midpoint to the vertical line segment we first need the length of segment A:

$$A = (3.67 - 2) = 1.67$$

We then divide the known distance of A in half to find its midpoint:

$$\frac{1.67}{2} = 0.835$$

We add this distance to the y value of 2, to get the midpoint of 2.83. Now we have the new coordinates for the midpoint of segment A (2, 2.83). To find out the coordinates on the intersection for the *Pareto Optimal Boundary*, we follow the same procedure to find the x value:

$$y = -\frac{1}{3}x + \frac{13}{3}$$

$$2.83 = -\frac{1}{3}(x) + \frac{13}{3}$$

$$-1.50 = -\frac{1}{3}(x)$$

$$x = 4.5$$

Now we have the new coordinates for the intersection on the segment C (4.51, 2.83). Again, this point lies on an extension of the *Pareto Optimal Boundary*; the nearest point on the boundary itself is the *Nash Point*, or AC (4, 3).

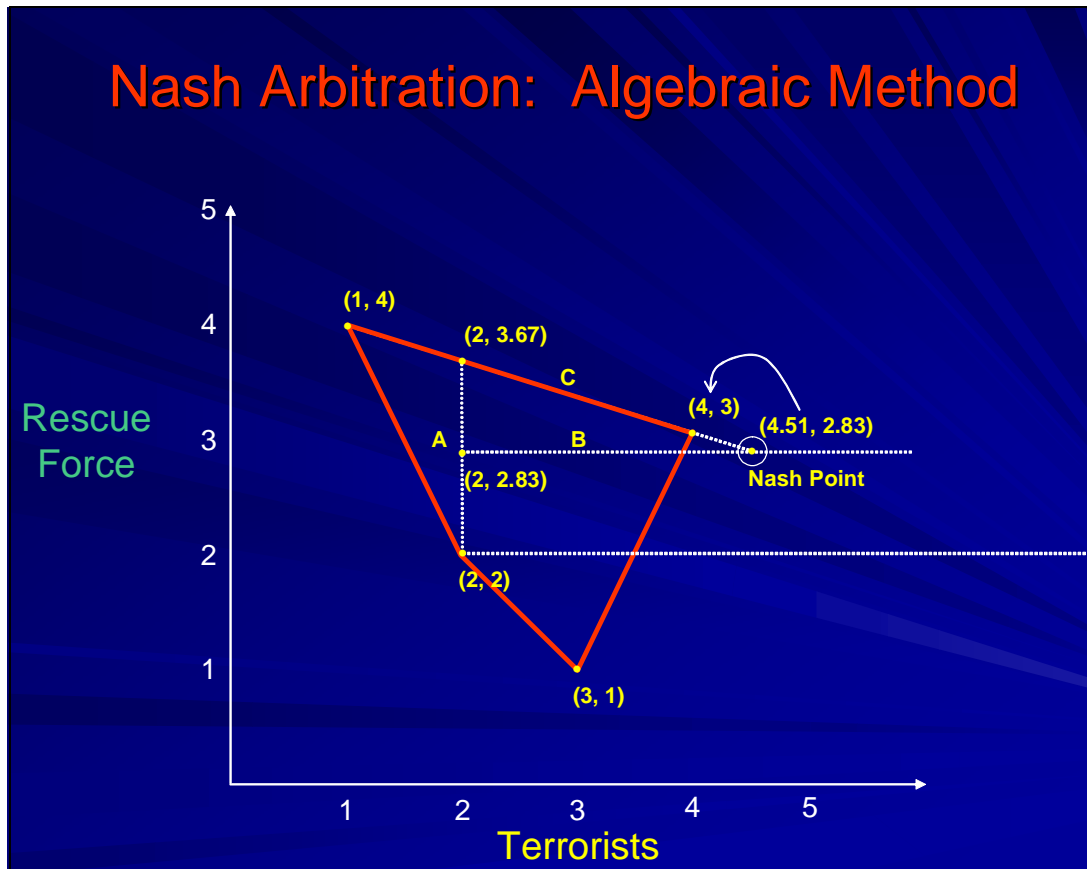


Figure 25. Author's Representation of the Nash Arbitration Algebraic Method

Knowing that the best possible outcome during the Hostage Dilemma is not to kill the hostages and meet the demands, the negotiator is faced with the job of trying to lower the payoffs of the terrorist force (4), at the same time as he tries to raise the payoffs of the rescue force (3). It will be the only way for the best possible outcome, AC (4, 3), to be attractive for the rescue force while still satisfying almost all of the terrorists' demands.

2. Interpretations

Does this mean that by cheating now, the government of Peru will be punished for their decision in the long run? Apparently not. The Peruvian government has adopted a hard stance towards acts of terrorism, and it is in a way trying to change this infinitely repeated game model into a single game model. The belief is that by denying any success to hostage takers on their first try, the terrorists will be deterred from ever attempting another act of terrorism in that country, knowing that the government of Peru

will not negotiate with terrorists. The government of Peru did not worry about cheating the terrorists nor being punished in the future because they hope that there will never be another game to play with the MRTA or any other terrorist group in Peru.

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VII. THE HOSTAGE DILEMMA REVISITED

In the first section of this chapter, we discussed the players' negotiating maneuvers as specific moves in a noncooperative game and the rationality assumptions were expressed using the Nash Equilibrium. We then explored the implications of different strategic moves and the importance of establishing communications immediately, in order to proceed with the negotiations process to buy time or deceive the terrorists.

By using the game theory approach to the Hostage Dilemma, we can represent all possible strategic moves available to the players involved in order to come up with a Pareto Optimal outcome. This outcome is the best possible outcome for both players; if there is an outcome that would lead both players to a better solution, the decision reached is not Pareto Optimal. Stated differently, an agreement is Pareto Optimal if one party cannot do better without some other party doing worse. Consider the following scenario in Figure 26:

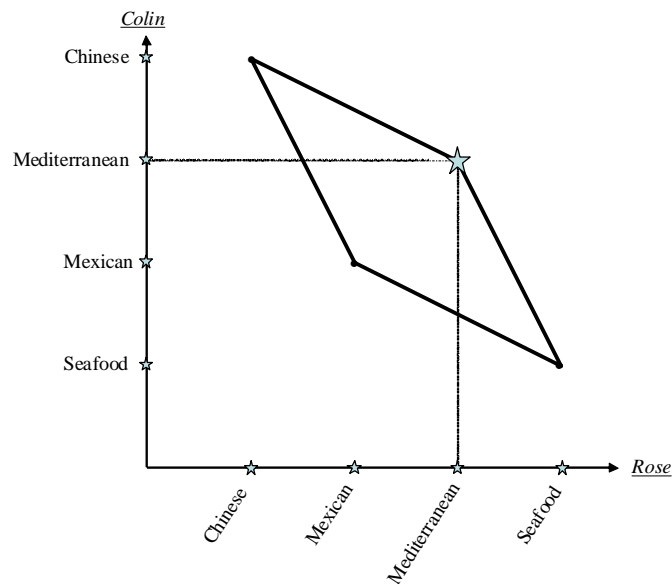


Figure 26. Author's Representation of a Pareto Optimal Outcome

Rose and Colin are making plans to go out for dinner together and are considering four choices. Colin's favorite food is Chinese and cannot eat seafood. Rose's favorite is seafood and cannot stand Chinese. They have a several options to decide where to go for

dinner. They could both go for Chinese, or they could both go for seafood. They both like Mexican food occasionally, but both prefer Mediterranean. The Pareto Optimal outcome for this problem can be solved on XY plot; Colin's preferences for dinner listed on the Y-axis, and Rose's preferences for dinner on the X-axis. For Colin, Chinese food is at the top of his choices, followed by Mediterranean, Mexican and lastly, seafood. For Rose, seafood is at the top of her choices, followed by Mediterranean, Mexican, and lastly Chinese. Both Colin and Rose prefer Mediterranean to Mexican. The decision to go to a Mediterranean restaurant is better than the Mexican restaurant for both Colin and Rose. This choice is Pareto Optimal because the only choice that is better for Colin (Chinese) leaves Rose worse off. Consequently, the only decision better for Rose (seafood) leaves Colin worse off (similar example found in *Negotiations and Resolving Conflicts: An Overview*, E. Wertheim, 2004).

A. EXPANDING UTILITIES; A MORE PRACTICAL APPROACH

It is only appropriate that we revisit the Hostage Dilemma and apply respective utilities to the initial model (see Figure 18). It is time to consider more thoroughly the process of assigning numbers to outcomes, for the applicability of game theory to real situations rests on the assumption that this can be done in a reasonable way (Straffin, 1993, p.49). Assigning utilities only on a 1-4 scale automatically assumes that both players have the same interests and each value is directly proportional to its corresponding opponent's value. This could be the case in a given hostage situation, but it will most likely be the exception rather than the norm.

Each party has a set of objectives they wish to achieve, and a certain number of utility points. These utility points are assigned in order to distinguish the complex and different preferences of both players, in a way that will allow us to see the subtle differences.

There are multiple hostage scenarios with different sets of players and variables for unusual situations. For the scope of this work, I have subdivided the players into four main categories to address the peculiarities of certain hostage situations and its players: Guerrilla Terrorist, Fanatic Terrorist, Competent Rescue Force, and an Incompetent Rescue Force. The following descriptions summarize the four different groups.

1. Guerrilla Terrorist

The guerrilla terrorist defines a group that is fighting for a specific political cause with an intended long-term goal in sight. This group is more concerned about the long-term effects and ramifications to its organization.

2. Fanatic Terrorist

On the other side of the spectrum, we categorize the fanatic terrorist who is more concerned about the shock value of the actual incident itself; short-term goals mean more than the long-term outcomes.

3. Competent Rescue Force

The competent rescue force designates a country with an internal national level rescue unit that is highly trained and capable of responding to a hostage crisis at a moment's notice.

4. Incompetent Rescue Force

This category designates a country without an internal national level rescue unit capable of responding to a hostage crisis, or a country with an ill equipped rescue force that cannot respond to a crisis at a moment's notice; this group is not ready to respond to a crisis without outside help from another country's national level rescue force.

The following tree diagram shows the possible combinations for each player and optimal solution sets using game theory principles for decision-making. Each player is portrayed showing all possible moves and outcomes utilizing the principles of Game Theory. This model helps visualize and describe the rationale behind the decision process of meeting the demands of terrorists, sending a rescue force, or buying time to develop a deception.

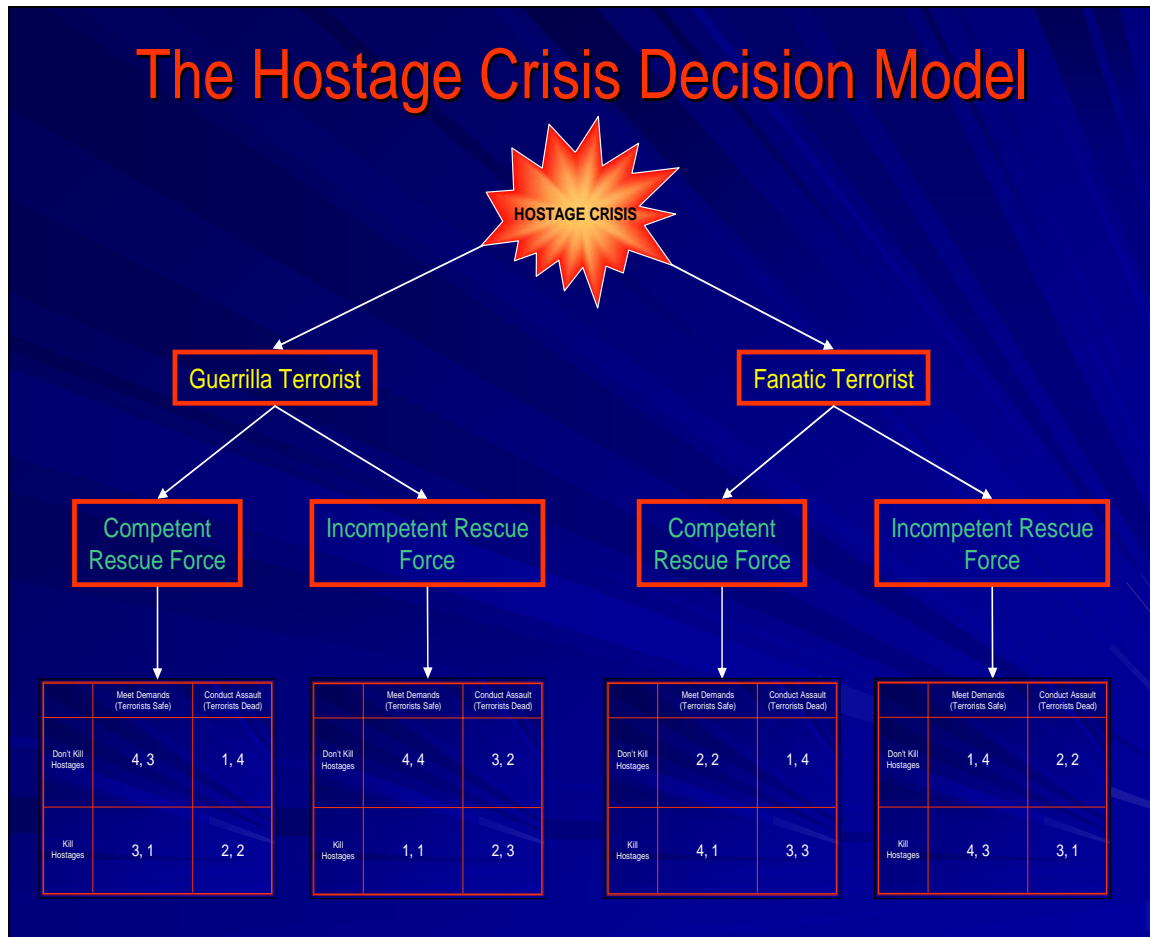


Figure 27. Author's Representation of the Hostage Crisis Decision Model

B. UTILITY VALUES

Each player has been assigned a set of utilities for each specific case, ranging from 0-10, 10 being the best. Although the process is somewhat subjective, it forces the planner to dig deep into the respective utilities of each player and come up with a more accurate representation of the stakes at hand. For the rescue force as well as the terrorist force, there are four sets of utilities addressed respectively. These components, when added, provide the overall utility for that specific move.

1. Rescue Force Evaluating Criteria

a. Hostage Outcome

The hostage outcome criterion represents the outcome of the hostages once the crisis has ended.

b. Terrorist Endstate

The endstate for the terrorists represents the final outcome of the terrorists once the crisis has ended. When looked at as a rescue force utility, it represents the physical status of the terrorists individually as well as an organization.

c. Government Reputation

The government reputation represents the gain or loss of face value for the government of that specific country at the end of the crisis. Did the government violate national policy? Was the government defaced throughout the process? What kind of blowback is the government expected to receive because of its decision?

d. Risk to Rescue Force

The risk to the rescue force represents the physical risk to the rescue force measured in lives lost.

2. Terrorist Force Evaluating Criteria

a. Demands Met or Not

This criterion represents whether the terrorists original demands were met or not at the end of the crisis.

b. Terrorist Credibility / Reputation

This criterion represents how well the terrorists held to their original threats and promises, and what the implications of their actions are for them and their organization during future acts of terrorism.

c. Risk to Terrorists

This risk represents the physical risk to the terrorists in lives lost.

d. Future of Organization

The future of the organization represents the possibility of growing as an organization for future operations. If the rescue force conducts the assault, terrorists will most likely die, reducing the numbers of the terrorist organization for future acts; therefore, a Conduct Assault move will earn the terrorists a lower score.

Scenario “A” (Figure 28) is the basic model used during our previous explanation of the Hostage Dilemma. It is the scenario best described by Operation CHAVIN DE HUANTAR in Lima, Peru discussed earlier. Here the terrorists represent a competent force with a thought out agenda in line with their political motives and

guerrilla warfare strategy. Even though Peru did not initially have a very competent hostage rescue capability, because of the prolonged duration of the hostage crisis, they were able to create a very competent and ready counterterrorist force.

C. GUERRILLA TERRORIST VS. COMPETENT RESCUE FORCE



Figure 28. Author's Representation of Scenario A with XY plot

Rescue Force Utilities				
Rescue Force Utilities: (From 0-10; 10 being best, 0 is worst)	Don't Kill Hostages / Meet Demands	Don't Kill Hostages / Conduct Assault	Kill Hostages / Meet Demands	Kill Hostages / Conduct Assault
	AC (4,3)	AD (1,4)	BC (3,1)	BD (2,2)
Hostage Outcome	10	8	0	0
Terrorist Endstate	3	10	1	7
Government Reputation	2	10	0	4
Risk to Rescue Force	10	8	10	5
Total:	25	36	11	16

Terrorist Force Utilities				
Terrorist Utilities: (From 0-10; 10 being best, 0 is worst)	Don't Kill Hostages / Meet Demands	Don't Kill Hostages / Conduct Assault	Kill Hostages / Meet Demands	Kill Hostages / Conduct Assault
	AC (4,3)	AD (1,4)	BC (3,1)	BD (2,2)
Demands Met or Not	10	0	10	0
Terrorist Credibility / Reputation	10	4	7	8
Risk to Terrorists	9	2	4	0
Future of Organization	10	1	7	4
Total:	39	7	28	12

D. GUERRILLA TERRORIST VS. INCOMPETENT RESCUE FORCE

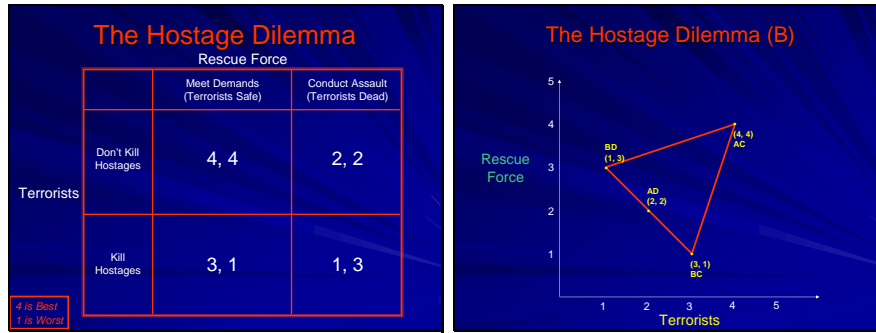


Figure 29. Author's Representation of Scenario B with XY plot

Rescue Force Utilities				
Rescue Force Utilities: (From 0-10; 10 being best, 0 is worst)	Don't Kill Hostages / Meet Demands	Don't Kill Hostages / Conduct Assault	Kill Hostages / Meet Demands	Kill Hostages / Conduct Assault
	AC (4,4)	AD (2,2)	BC (3,1)	BD (1,3)
Hostage Outcome	10	4	0	2
Terrorist Endstate	3	6	1	9
Government Reputation	9	5	0	8
Risk to Rescue Force	10	4	8	3
Total:	32	19	9	22

Terrorist Force Utilities				
Terrorist Utilities: (From 0-10; 10 being best, 0 is worst)	Don't Kill Hostages / Meet Demands	Don't Kill Hostages / Conduct Assault	Kill Hostages / Meet Demands	Kill Hostages / Conduct Assault
	AC (4,4)	AD (2,2)	BC (3,1)	BD (1,3)
Demands Met or Not	10	0	10	0
Terrorist Credibility / Reputation	10	2	4	7
Risk to Terrorists	9	8	2	3
Future of Organization	10	5	6	3
Total:	39	15	22	13

E. FANATIC TERRORIST VS. COMPETENT RESCUE FORCE

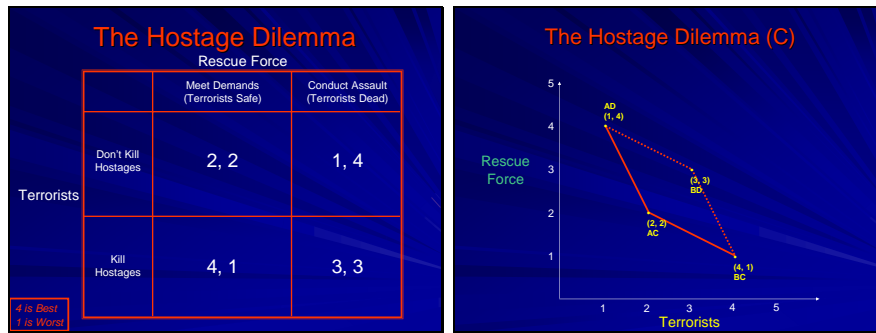


Figure 30. Author's Representation of Scenario C with XY plot

Rescue Force Utilities				
Rescue Force Utilities: (From 0-10; 10 being best, 0 is worst)	Don't Kill Hostages / Meet Demands AC (2,2)	Don't Kill Hostages / Conduct Assault AD (1,4)	Kill Hostages / Meet Demands BC (4,1)	Kill Hostages / Conduct Assault BD (3,3)
Hostage Outcome	10	8	0	3
Terrorist Endstate	0	10	2	8
Government Reputation	1	8	0	6
Risk to Rescue Force	10	8	10	7
Total:	21	34	12	24

Terrorist Force Utilities				
Terrorist Utilities: (From 0-10; 10 being best, 0 is worst)	Don't Kill Hostages / Meet Demands AC (2,2)	Don't Kill Hostages / Conduct Assault AD (1,4)	Kill Hostages / Meet Demands BC (4,1)	Kill Hostages / Conduct Assault BD (3,3)
Demands Met or Not	6	2	10	8
Terrorist Credibility / Reputation	5	0	9	10
Risk to Terrorists	7	6	7	5
Future of Organization	8	3	10	7
Total:	26	11	36	30

F. FANATIC TERRORIST VS. INCOMPETENT RESCUE FORCE

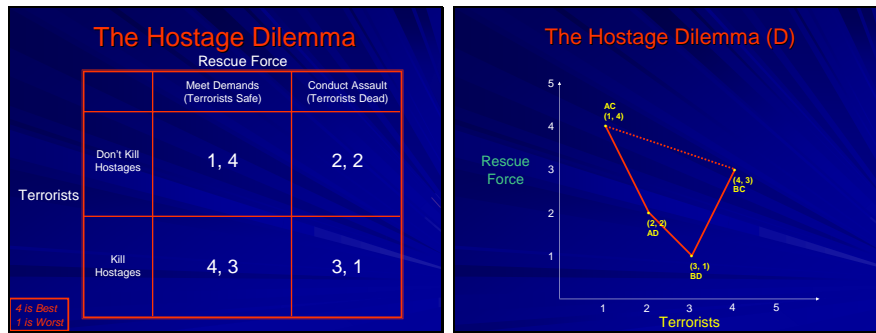


Figure 31. Author's Representation of Scenario D with XY plot

Rescue Force Utilities

Rescue Force Utilities: (From 0-10; 10 being best, 0 is worst)	Don't Kill Hostages / Meet Demands AC (1,4)	Don't Kill Hostages / Conduct Assault AD (2,2)	Kill Hostages / Meet Demands BC (4,3)	Kill Hostages / Conduct Assault BD (3,1)
Hostage Outcome	10	4	0	2
Terrorist Endstate	5	7	4	5
Government Reputation	9	3	6	7
Risk to Rescue Force	10	3	10	0
Total:	34	17	20	14

Terrorist Force Utilities

Terrorist Utilities: (From 0-10; 10 being best, 0 is worst)	Don't Kill Hostages / Meet Demands AC (1,4)	Don't Kill Hostages / Conduct Assault AD (2,2)	Kill Hostages / Meet Demands BC (4,3)	Kill Hostages / Conduct Assault BD (3,1)
Demands Met or Not	5	2	10	8
Terrorist Credibility / Reputation	0	8	10	9
Risk to Terrorists	7	6	8	3
Future of Organization	6	5	10	7
Total:	18	21	38	27

G. NEW SOLUTIONS

The following diagrams are the four scenarios with their respective assigned utilities:

The Hostage Dilemma (A)		The Hostage Dilemma (B)	
Competent Rescue Force		Incompetent Rescue Force	
Guerrilla Terrorists		Meet Demands (Terrorists Safe)	Conduct Assault (Terrorists Dead)
	Don't Kill Hostages	39, 25	7, 36
	Kill Hostages	28, 11	12, 16

Figure 32. Scenario A and Scenario B with new utilities

The Hostage Dilemma (C)		The Hostage Dilemma (D)	
Competent Rescue Force		Incompetent Rescue Force	
Fanatic Terrorists		Meet Demands (Terrorists Safe)	Conduct Assault (Terrorists Dead)
	Don't Kill Hostages	26, 21	11, 34
	Kill Hostages	36, 12	30, 24

Figure 33. Scenario C and Scenario D with new utilities

H. CONCLUSION

Conceding to terrorists' only encourages the proliferation of future hostage taking. Regardless of the difficulties involved in trying to maintain a hard-line against terrorists, it is better than to give in to their demands. From the game matrix in Figure 18 (the Hostage Dilemma), we see that the dominant strategy for any country with a competent rescue force is to conduct the rescue attempt, whether the terrorists decide to kill the hostages or not. This strategy reinforces the "no negotiations" policy of most countries towards terrorists. The terrorists will thus have to make a decision based on this knowledge.

The *Nash Arbitration Method* tells us that there is a better solution to the Hostage Dilemma than the *Status Quo Point*. To achieve this, immediate communications must be established between the terrorists and the country's government where the crisis is taking place, in order to prevent a catastrophe. It is up to the targeted country to decide whether to meet the demands of the terrorists, or to cheat the system by deceiving the terrorists and conducting an assault.

Governments should always take a harsh and unyielding stance against terrorists, even if it is the riskier move. Yielding to terrorists' demands will only encourage terrorism. The best stance a country can take is to make it obvious that it is united against acts of terrorism. The commitment to this cause reduces the infinitely repeated game into a single game—one that is unplayable for the terrorists because, unless they decide to stop participating in the game, they will always find themselves at the losing end (Tay & Foo & Wee, 2003, p. 14).

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VIII. OPERATION EAGLE CLAW⁵⁶: DISASTER AT DESERT ONE

A. BACKGROUND

No study of hostage rescue operations is complete without looking at the Iran hostage rescue attempt of 1980. The following chapter is an organizational study of Joint Task Force 1-79 and its participation in Operation EAGLE CLAW. Using Henry Mintzberg's *Structures in Fives: Designing Effective Organizations* as a base reference for organizational theory, the discussion focuses on the organizational structure of the joint task force and the design flaws, which ultimately led to the disaster at DESERT ONE. The discussion focuses on how, even though the operational structure and integrity of individual elements in this organization remained sound, the myriad of layers and the lack of connectivity among these elements led to the catastrophe at DESERT ONE. More importantly, this case study will show how a failure to follow the hostage rescue principles of intelligence, surprise, operator's skill, and deception, and how they relate to the crisis biorhythm, caused the mission to fail. It will demonstrate the importance of having a sound military strategy that deals with these incidents, focusing on the hostage rescue principles and the crisis biorhythm.

The Iran hostage rescue attempt in April of 1980 is one of the greatest military misfortunes of modern warfare, specifically in the hostage rescue arena. It is a perfect example of how highly skilled and trained personnel, placed in an uncertain environment, fail at what they are supposed to do best. Throughout history, counterterrorist forces have been sent into high-risk situations in uncertain environments and have often failed in the face of uncertainty. Botched rescue operations by international CT units such as the failed rescue of Israeli athletes at the Munich Olympics of 1972 (see Chapter IX, section B), the failed rescue of Egyptair Flight 648 in Malta in 1985 (see Chapter IX,

⁵⁶ Operation Eagle Claw was the operational name given to the execution phase of the rescue mission; the cover name was "Rice Bowl", "...chosen by General Vaught to avoid a hint of linkage with Iran, hostages or rescue" (Lennahan, 1998, p.38). "The term Eagle Claw was reminiscent of the operational nickname (Eagle Pull) given to the earlier emergency evacuation of Phnom Penh, Cambodia" (p. 127).

section C), and the most recent disaster at the Moscow theatre⁵⁷ in 2002, are just some of these terrible examples. Other examples involve U.S. forces in Iran, Grenada⁵⁸, Panama⁵⁹, and Mogadishu⁶⁰, all with highly skilled and well-trained personnel facing catastrophic consequences due to factors beyond their control. Why do highly skilled and well-trained personnel fail to do what they are perfectly capable of doing when they are placed in a high risk and complex environment? The answer to this question rests in a lack of understanding at the strategic and operational levels, of the hostage rescue principles—intelligence, surprise, operator’s skill, and deception.

While the complexity of such operations is in part to blame for these misfortunes, other common denominators can be found among all of these cases. Combining Lucien Vandenbroucke’s list of recurrent problems for SOF operations with Cohen and Gooch’s theory of failure, and looking at the common trends found throughout these operations, we can find some common patterns that cause these misfortunes and reinforce the hypothesis for a hostage rescue model.

In *Perilous Options*, Lucien Vandenbroucke describes four factors as recurrent problems for SOF operations: faulty intelligence, poor interagency and inter-service cooperation and coordination, inadequate information and advice to decision makers

57 On 26 October 2002, Russian special forces stormed the Palace of Culture theatre in the heart of Moscow, to rescue over 900 hostages from 50 Chechen terrorists holding them captive. Before assaulting the theatre, the soldiers pump fentanyl through the air ducts (a heroin-like chemical 100 times more potent than morphine), to put everyone to sleep (the SF soldiers had all been treated with the antidote to the gas). Over 112 hostages died from the effects of the gas and 700 more were injured. All the terrorists were killed.

58 Operation URGENT FURY in Grenada - Salinas Airfield Recon/Beacon Emplacement where four SEALs drowned during a paratroop jump into the ocean. The failure of the teams to complete the mission was a blow to SEAL Team SIX, which was facing its first major test in an armed conflict. The Rangers completed their jump without the CCT acting as air controllers, but the lack of intelligence did not give the planners and operators the confidence often sought prior to an operation. Further, the operation had the effect of pushing back H hour - first to 0400 hours then to 0500 hours on 25 Oct 1983. The new H hour had far reaching consequences, because the remaining special operations were to be conducted now in daylight, instead of the customary comfort of darkness. To break this basic tenant of special operations warfare was a decision, which cost numerous U.S. lives, and was probably the biggest mishap of the Grenada invasion (Information retrieved from <http://www.navyseals.com/ops/salinas.html>; last accessed on 16 August 2004).

59 Panama: Operation JUST CAUSE - Paitilla Airfield: A planned 5-hour mission to destroy General Noriega’s private plane turned into a 37-hour operation. Four SEALs died and eight others were wounded after Panamanian Defense Forces (PDF) surprised the SEALs with a well-planned ambush. (Information retrieved from http://www.specialoperations.com/Operations/Just_Cause/Operation_Profile3.htm, last accessed on 16 August 2004).

60 Task Force Ranger operation in downtown Mogadishu to apprehend General Aideed and several of his lieutenants. The operation against a mediocre enemy resulted in 18 U.S. soldiers dead and many others wounded.

(wishful thinking), and excessive control of mission execution from afar. In *Military Misfortunes*, Cohen and Gooch present their version of a model for failure for these types of operations, as a direct result of a combination of four circumstances. First, an overestimation of abilities, also known as overconfidence and/or wishful thinking. Second, a lack of contingency planning and preparation. Third, an internal drive and pressure to excel at all cost. Fourth, a critical need for the mission to be accomplished during a limited window of opportunity. Taking into consideration both models of failure, we can superimpose our model for the principles of hostage rescue operations, and see the criticality of each principle.

As we look at military hostage rescue failures involving SOF units, we can identify the same common denominators in all of them. In the case of the Iran hostage rescue attempt, numerous factors caused the disaster—the faulty intelligence, the failure to have the appropriate mix of operator skills, a complete lack of a deception plan, and the loss of the element of surprise. These factors coupled with the failure of not monitoring the best windows of opportunity through the crisis’ biorhythm, were a recipe for disaster.

B. CASE STUDY

On 4 November 1979, a mob of Iranian Islamic militants, using a crowd of student protesters as a deception screen, overran the American Embassy in downtown Teheran. More than 100 people were taken hostage, including many Americans. On 25 April 1980, after five months of tense negotiations to release the American hostages had failed, President Jimmy Carter sent a military rescue mission into Iran, composed of Army, Navy, Air Force and Marines, to rescue the American hostages. The rescue mission was aborted⁶¹ after three RH-53D helicopters broke down en route to Dasht-e-Kavir, the remote desert site known as DESERT ONE. During exfiltration procedures from DESERT ONE, two aircraft collided while attempting to reposition during refueling; eight crewmembers, five from the U.S. Air Force and three U.S. Marines, died as a result of the engulfing fires from the crash. The mission was a complete failure, and

⁶¹ The tragic sequence that occurred during helicopter refueling at DESERT ONE was subsequent to the mission abort decision, but is often misinterpreted as the cause of mission abort (Buck, 2002, p. 47).

even though a new rescue plan was developed, no other rescue attempts were made to free the hostages.



Figure 34. Concept and Mission Plan (Information retrieved from <http://www.1sos.com/desertone.html>, last accessed on 28 Jul 04)

C-130s were to fly the rescue force from Masirah to DESERT ONE. Helicopters, flown from the USS Nimitz, would carry the rescuers to a hideout near Tehran. The next night, the commandos were to drive to the embassy to release the hostages. The helicopters then were to carry the rescuers and hostages to the abandoned Manzariyeh air base, where C-141s would fly them to Egypt. (Kreisher, 1998, p.1) (Information and illustration retrieved from <http://www.1sos.com/desertone.html>, last accessed on 28 Jul 04).

C. ANALYSIS

1. Organization of JTF 1-79

Five days after the siege Teheran, President Carter directed the formulation of military option plans for a possible rescue attempt. On 12 November 1979, the rescue force was officially organized as a Joint Task Force under the designation of JTF 1-79. It was established specifically for resolving the hostage situation in Iran. At this point in

time, there was no formal Counter-Terrorism Joint Task Force in the United States. At the end of the hostage ordeal, JTF 1-79 would become the Joint Special Operations Command (JSOC)⁶².

The JTF was initially composed of 32 personnel from the Army, Air Force, Navy, and Marines. Two liaison officers from the CIA, who coordinated JTF interface with both the CIA and the State Department, supported it. On mission execution day, the combined number of military personnel directly involved in the rescue mission exceeded 1,000 (389 who entered Iran and 569 that provided direct support, plus another 100 or more intelligence, cartographic and communications personnel that supported off stage)(Lennahan, 1998, p. 114).

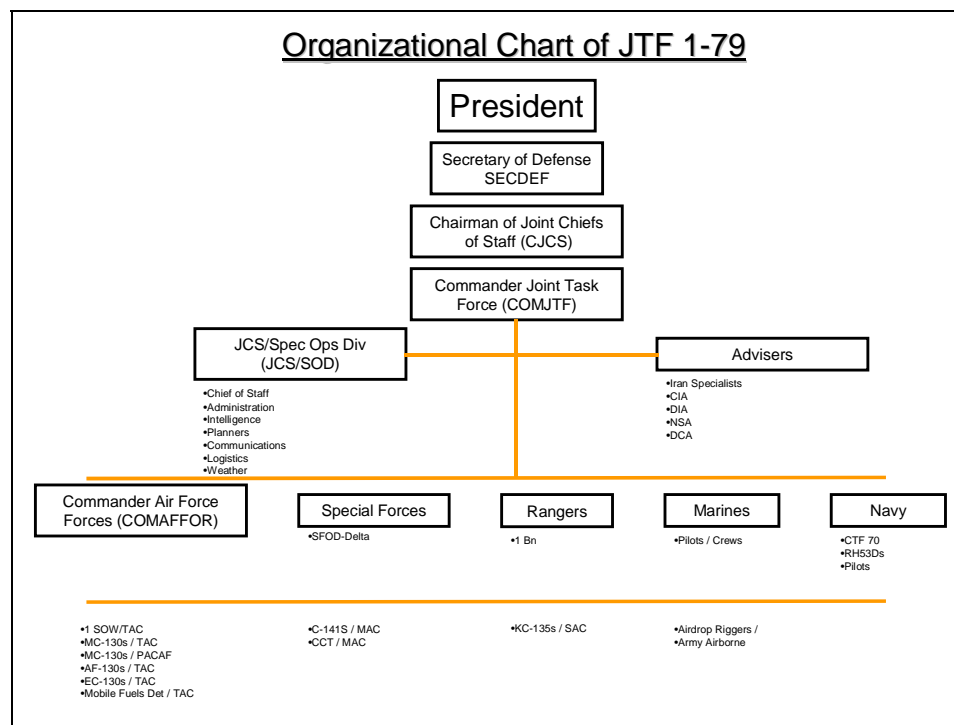


Figure 35. Author's Representation of JTF 1-79 Task Organization (Kyle, 1995, p.68)

The structure of the assault party was highly fractured. The rescue element consisted of approximately 13 separate sub-elements, without a single unifying factor that could join them as one element (Flynt III, 1995, p. 11). The critical element in this task

⁶² The transfer of mission responsibility from JTF 1-79 to the new Joint Special Operations Command (JSOC) began in mid-December and was concluded on 22 December 1980. On that date, JTF 1-79 was formally deactivated, and JSOC assumed responsibility for rescue planning and command (Lennahan, 1998, p. 184).

organization was the assaulter or ground raiding force (Delta). This would be the center of gravity for the organization, headed by Colonel Charles A. “Charlie” Beckwith. A Special Forces officer, Colonel Beckwith had been officially tasked two years prior to the hostage situation to create a counterterrorist (CT) capable force. Beckwith had been advocating the creation of such a unit, similar to the British Special Air Service (SAS) since the early 1960’s. His concept was a low-visibility CT night action by a relatively small, specially trained force equipped with unique weapons and equipment (Lennahan, 1998, p. 9).

This organization (Delta) was structured using the squadron structure for task organization (after the British SAS model). A squadron was formed of several units, each composed of sixteen men; each unit was then divided into smaller groups of four men or two teams of eight men each. By July of 1978 the first squadron of Delta Force was formed. Its real test would come in the events to follow at DESERT ONE, barely a few hours after Delta’s final certification exercise in November of 1979. For Operation EAGLE CLAW, Colonel Beckwith organized his force into three 16 men elements: a Red team, a White team, and a Blue team. In order to support the personnel requirements, Colonel Beckwith had to use everyone in his unit; instructors, staff personnel, and other support personnel.

a. Vertical or Horizontal Differentiation

Organization differentiation is the differences in cognitive and emotional orientations among managers in different functional departments, and the difference in formal structure among these departments (Daft, 1998, p. 93).

Each unit planned, trained, and rehearsed at their designated home station, with the intent of coming together at some point for a mass dress rehearsal in the end, which never occurred. “The larger the organization, the more elaborate its structure – that is, the more specialized its tasks, the more differentiated its units, and the more developed its administrative component” (Mintzberg, 1993, p. 124). Vertical differentiation for the JTF as well as the raiding force was very minimal. There was great horizontal differentiation among the multiple elements at the tactical level. As time went by and the hostage situation developed, the organization grew bigger and more specialized tasks surfaced. This created more differentiation in all the sub-elements.

When external environment is complex and rapidly changing, organizational departments become highly specialized to handle the uncertainty in their external sector (p. 93).

The need to refuel more and more aircraft, the addition of fighter jets and AC-130's for combat air support, the addition of another 12 men element from Germany, all had a major impact in the connectivity of elements and the overlapping of layers in the JTF.

b. Departmentation

The unique mission that the JTF was faced with required a unique type of organizational structure, one that was non-existent. There was no template to handle a CT scenario of this type. The intent for the organization of JTF 1-79 and the raiding force can be best characterized as a *matrix*.

By using a matrix structure, the organization avoids choosing one basis of grouping over another; instead, it chooses both....As a result, matrix structure sacrifices the principle of unity of command (Mintzberg, 1993, p. 86).

The unity of command concept for JTF 1-79 was non-existent throughout the operation. During the events at DESERT ONE, nobody knew who had the authority or the final decision. General Vaught did not want to relinquish authority of command to any specific individual on the ground, resulting in four component commanders trying to make decisions in an unstable and complex environment.

Vertical decentralization is the dispersal of formal power down the chain of command. Horizontal decentralization refers to the extent to which non-managers control decision processes (p. 99). It brings the technostructure, the support staff, and the operating core into the power system (p. 118). An organization that is vertically decentralized will coordinate its decision-making largely by mutual adjustment (p. 102). In horizontal decentralization, formal power rests with the operators who are empowered to elect managers of the strategic apex.

Each element within the JTF was organized to work as a machine bureaucracy, with total control of its own sub-elements. The original design of the organization to work as a matrix did not work due to the operational restrictions imposed.

The JTF had no proper unity of command and did not understand how to organize the various units to work effectively. General Vaught figured that since each element was made up of professionals, experts in their own field, that the whole group would automatically come together once on the ground.

c. Centralized-Decentralization

A structure for an organization is centralized when all the power for decision-making rests at a single point in the organization, in the hands of one person. A structure is decentralized when that same power is dispersed among many people. Organizations go to a decentralized structure when all the decisions cannot be understood or handled by one person. A decentralized organization allows for quick responses to local conditions. It also stimulates motivation (Mintzberg, 1993, p. 97). The more complex the environment, the more decentralized the structure. Within the organizational structure of the raiding force, each element was centralized, but within each one of those elements, it was completely decentralized. Here, the layers between the JTF elements are separated and lead to the disaster at the refueling site. Each small element knew exactly what to do; they knew their respective chain of command and could act completely decentralized within that one element. The layers got confused between each of the elements horizontally and vertically.

DESERT ONE became a scene from hell itself. None of the principles on the scene...was wearing any distinctive clothing or markings, and Kyle kept dashing from one plane to another and then among the helicopters....We lost unity of command, a paramount principle of war. Since I had at least some radio contact with every pilot on the landing zone, I should have strongly urged that Kyle stay in one place, a command-and-control point or tactical operations center where we could relay his questions and instructions through my combat controllers on our short-range intrateam radios or even by messenger on our motor bikes” (Carney and Schemmer, 2002, p. 91).

This unclear chain of command prevented a coordinated effort among elements. The designated leadership had no central location people could go to and ask questions, nor did the leadership have any specific uniform markings to identify them from the other operators. Absolute chaos resulted in the complete breakdown of communication within the elements on the ground as well as in the air: the blocking force element (Rangers), the Assault Forces (Delta), the C-130's on the airstrip, the

helicopters on the airstrip being refueled, the AC-130's in the air, and the commanders of each element in their own little world at the JTF and on the ground.

d. Standardization and Formalization

Standardization is the extent to which similar work activities are performed in a uniform manner. ...Formalization pertains to the amount of written documentation in the organization. Documentation includes procedures, job descriptions, regulations, and policy manuals. These written documents describe behavior and activities (Daft, 1998, pp. 15-16).

The older an organization, the more formalized its behavior (Mintzberg, 1993, p. 123). They adopt a “we have seen it all” attitude. This might have been the case with several members of the JTF during the initial planning stages, but that atmosphere quickly dissipated as the operation grew more complicated and the uncertainty increased. For most of the raiding force, this was the first time to conduct an operation of this type and magnitude, specifically Delta Force. Only a few members of the JTF had been involved with the Son Tay raid ten years prior. Others were part of a temporary organization named “Blue Light⁶³” which had been created from members of the 5th Special Forces Group (Airborne) to fill in the role of counter terrorist force while Delta was being formed.

Standardization of work processes grows over an extended period, moreover, on this instance, the JTF and the raiding force had approximately 6 months to become standardized. Some of the procedures and daily activities within separate elements became standardized, but due to the organizational design set up by General Vaught and the OPSEC restrictions, intermediate layers between elements became walls restricting the progress and cross-fertilization preventing standardization.

e. Mechanistic or Organic

Machine organizations are highly standardized. In an organic organization, there is an absence of standardization. The organization for the JTF and the raiding force was designed as a mechanistic organization, but it resulted in a *highly organic organization* with mechanistic sub-components that evolved into organic because

⁶³ Blue Light was the interim counter terrorist force created to fill the gap, until Delta Force got certified in November of 1979, several hours prior to the US Embassy takedown. The force was composed of specially selected personnel from the 5th Special Forces Group (Airborne), and it was disbanded upon Delta's approval by the NCA.

of the environmental factors, maybe too organic for such a set of tasks. Too much leeway was given to each specific unit in conducting its own preparations and rehearsals; not enough attention was paid to a final dress rehearsal for everyone to come together. Because of the complex nature of each separate element's mission and responsibility, the organization within each element was also highly organic.

Communications between the air component elements were confusing and disjointed. With the amount of aircraft involved in the operation, the JTF did not disseminate its communications plan between elements, causing one element to be completely unaware of what the other was doing. This was one of the main reasons for the disaster: if the pilots from the C-130's could have communicated with the helicopters, they could have told them to fly at a different altitude in order to get out of the sandstorms.

f. Fit Between Structure and Environment

Mintzberg describes the fit between structure and environment with two hypotheses: (1) the *congruence hypothesis*, which states that effective structuring requires a close fit between the situational factors and the design parameters, and (2) the *configuration hypothesis*, which states that effective structuring requires an internal consistency among the design parameters (Mintzberg, 1993, p. 122). Due to the complex environment that the raiding force was operating in, the organization was divided into multiple layers and sub-elements, without clear connectivity or unity of command. The ignorance of the environmental factors by the leadership and the operators drove the operation into a catastrophic disaster. The organization was put together with some resemblance of being mechanistic in nature, but it was left to become organic due to the nature of the operation and the uncertainty of the environment. The multiple layers of JTF 1-79 and the loss of control and connectivity between elements prevented a proper fit for the structure within its environment (Figure 36). We can observe how the environment clashed with the structure of the JTF and the raiding force. The structure of the organization did not allow for a fit with the unstable environment.

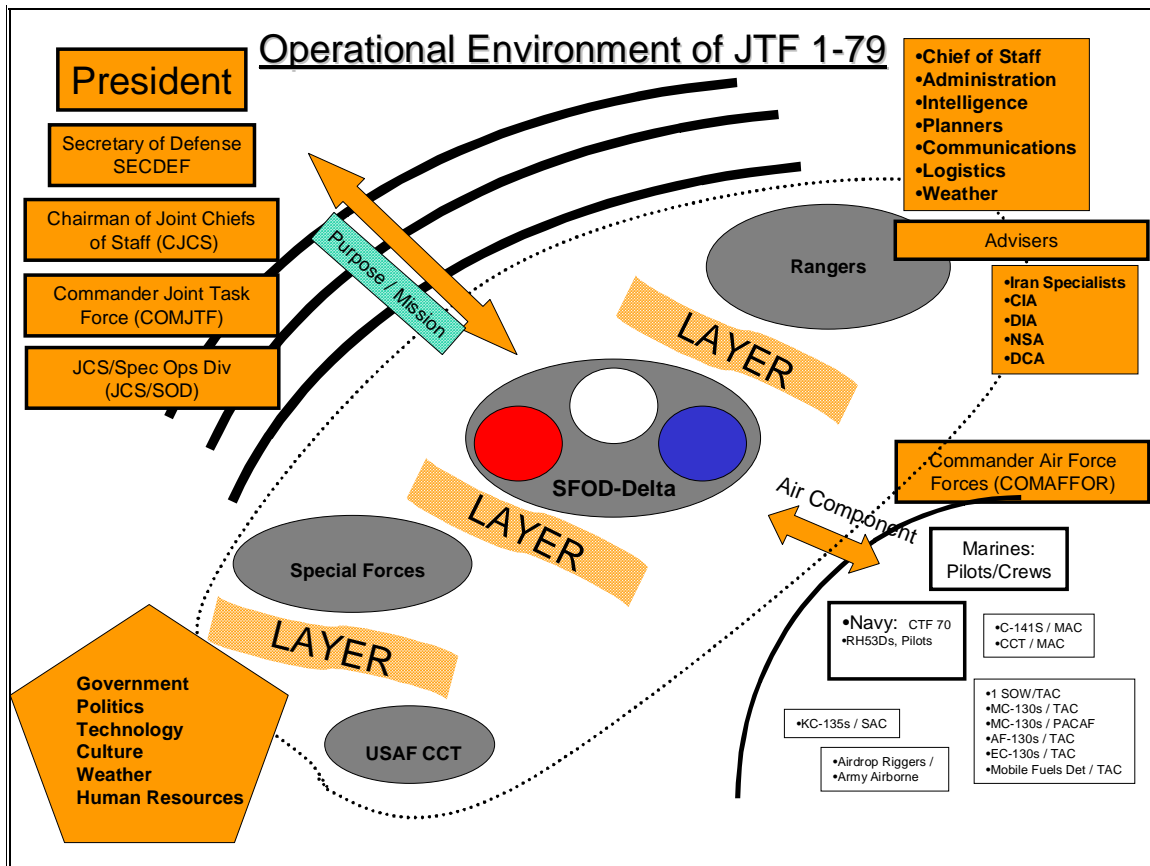


Figure 36. Author's Representation of Elements and Compartmentalization of JTF 1-79 at DESERT ONE

g. Diversity of JTF 1-79

The diversity of an organization refers to the number of markets it has to satisfy, that is, how many different types of products or services the organization provides.

The organization faced with a single integrated market simply cannot split itself into autonomous divisions; the one with distinct markets, however, has an incentive to create a unit to deal with each (Mintzberg, 1993, p. 225).

Joint Task Force 1-79 was primarily designed to satisfy one specific market. In other words, it had one mission: to develop a hostage rescue plan that could be executed successfully at a moment's notice to save the lives of the hostages. JTF 1-79 had a single purpose and mission—prepare a plan and train a force to rescue the American citizens illegally held in Iran, and be prepared to execute it on order (Lennahan, R., 1998, p. 39).

The overall goal for an organization is often called the mission—the organization’s reason for existence. The mission describes the organization’s vision, its shared values and beliefs, and its reason for being (Daft, 1998, p.48)

The military option to rescue the hostages was a last resort for the Carter Administration. All diplomatic efforts had been attempted with no positive outcome; the Iranian oil embargo, the freezing of Iranian assets in American banks, and multiple negotiations between governments had all failed. While the diversity for missions for JTF 1-79 was very low, the diversity of the supporting tasks to accomplish this mission was very complex and high. Each element of the raiding force had a specific essential task within the operation in support of the overall mission. Critical to the organization and the success of these tasks throughout the phases of the operation was the synchronization of all elements within the JTF, coming together at a specific place and time in Tehran 600 miles away from their staging areas. The high diversity of tasks, the complexity of technology, and the high levels of uncertainty caused by the interdependence of elements in the raiding force, made synchronization impossible. It is amazing that the whole force (minus two helicopters) still managed to assemble at DESERT ONE. This high diversity of supporting tasks to accomplish the main mission can best be understood by looking at the core technology of the JTF.

h. Core Technology of JTF 1-79

The core technology of an organization refers to how the organization accomplishes its assigned tasks with the technical systems they have in place. The development of the mission order for JTF 1-79 followed a similar process to the one described in the Joint Publication 5-00.2, Joint Task Force Plans and Policy:

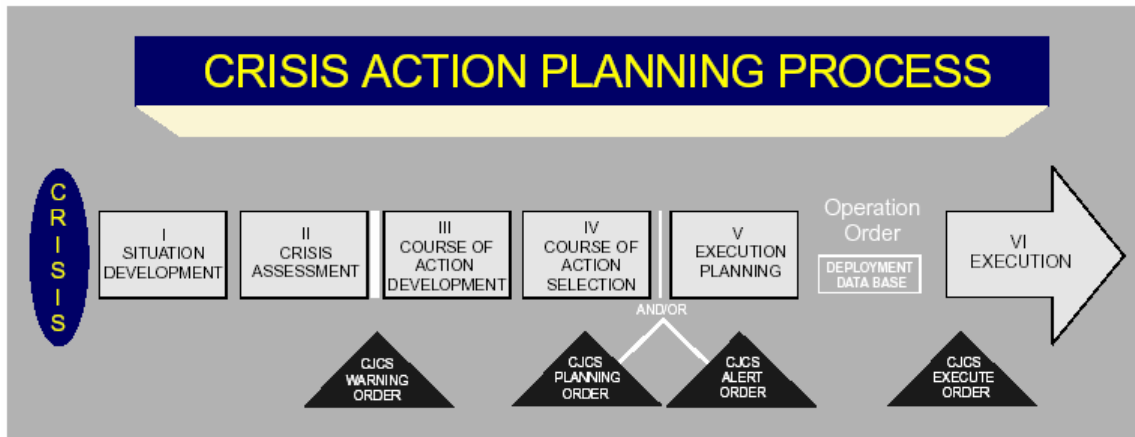


Figure 37. Task Architecture of JTF 1-79 (Joint Pub 5-00.2, 1999, p. IX-15)

2. Phase I: Planning, Preparation, and Rehearsals

The complexities of planning a rescue, the scale of which had never before been undertaken, were huge. Tactically conducting a rescue in a twenty-seven acre compound consisting of more than sixteen buildings holding upwards of 67 possible hostages at five different locations guarded by a force numbering more than 150, which in turn was supported by bands of armed zealot irregulars, was daunting. Coupled with the above were a hostile (or at least questionable) government status and an unpredictable civilian population that was in the throes of a social revolution. Compounding the problem was the fact that the rescue objective was located in a congested urban center more than 1,600 miles from the nearest American military base. The American Embassy was located almost dead center in the capital city, which held the potential to be very nasty hornet's nest, once disturbed.

In a nutshell, the situation was more challenging than any exercise, or series of “what if’s” problem-solving intellectual excursions ever conducted by REDCOM, Blue Light or Delta, or faced by the Israeli Defense Forces or the German CT-unit GSFG-9 (Lennahan, 1998, pp. 30-31).

To set up a rescue force that could accomplish the mission, the JTF conducted mission analysis processes in order to produce the operations order (OPORD). The core technology within the JTF was simple in order to develop and produce the output of the order. Once this master plan was approved, it was modified and improved as new intelligence surfaced throughout the hostage ordeal.

Once the master operations order (OPORD) was approved by the NCA, the JTF would wait for their “on order” execution call to conduct the operation. In the meantime, the plan continued to be refined and modified by developing detailed mission essential tasks list (METL) and joint METL responsible for focusing the specific elements within the organization. The METL and JMETL would serve a critical element in the core technology of the organization, providing a frame of reference for mission focus and success criteria. Without these lists of tasks to focus the organization, the mission could not succeed.

The orders process for JTF 1-79 followed the standard mission analysis format for the Military Decision Making Process (MDMP). The following diagram describes the sequential nature for the planning process.

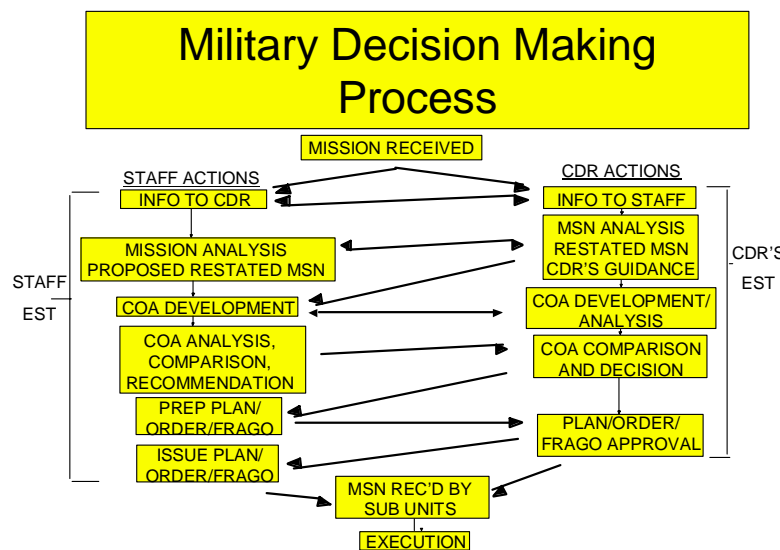


Figure 38. Author's Representation of the MDMP Process(FM 101-5, 1997, p. 5-2)

During the mission analysis phase of the operation, several mission-planning cells were developed to come up with different courses of action (COAs) on how to infiltrate the raiding force into Tehran and into the U.S. Embassy undetected. These COA working cells or “option teams” were compartmentalized into different buildings adjacent

to the JTF; they were isolated from one another in order to keep one plan from being influenced by the ideas of another planning group.

The option teams worked imaginatively and aggressively from 13 through 18 November. The courses of action examined included overland approaches from each of the neighboring countries. Helicopter launches from each, maritime infiltration via the Persian Gulf and the Caspian Sea, and both air-land and parachute entries were considered. The teams included a person familiar with the logistic nuances of the possible options and launch environments, plus officers familiar with the mobility and operational needs of the strike force (Lennahan, R., 1998, p. 40).

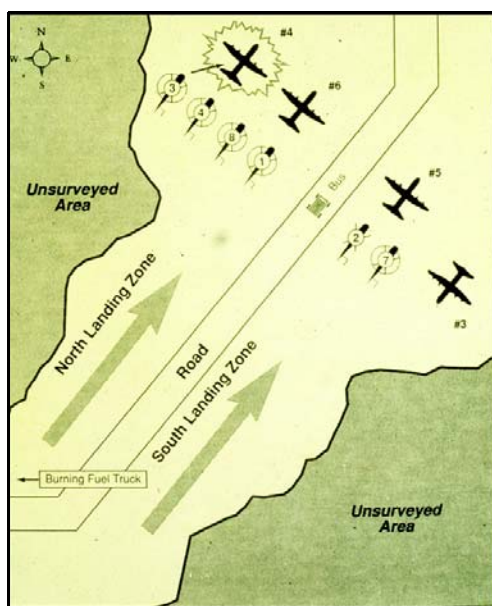
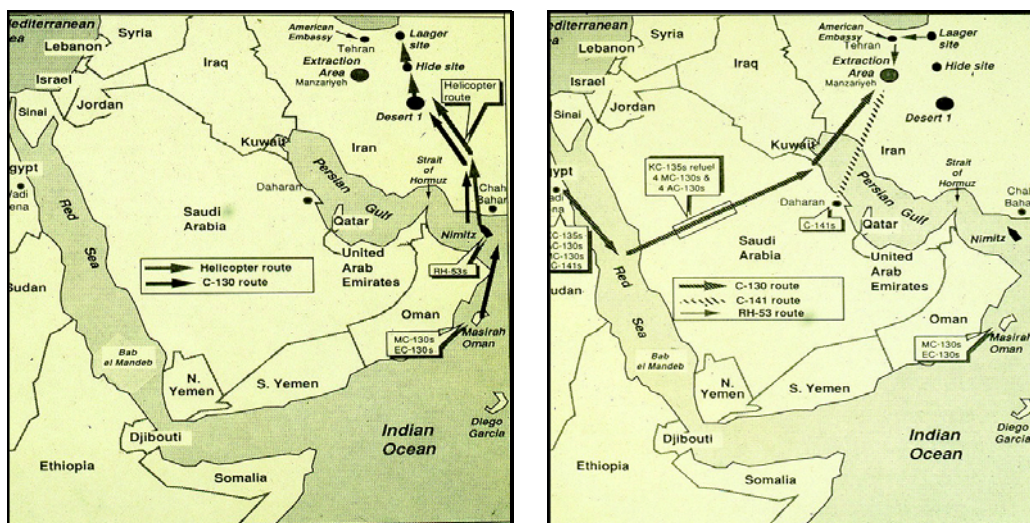
The complexity and uniqueness of command and control (C2) for this operation required a robust and highly reliable and secure communications network, from the NCA all the way down to the operators on the ground. “Communications had reached a new high in technical achievement with the satellite radio systems” (Kyle, 1995, p. 225). Rod Lennahan describes in his book *Crippled Eagle*, four communication networks that were established prior to the operation. *Command Net Alpha* provided the link from the NCA/CJCS in Washington to JTF Headquarters at Wadi Kena and to the alternate location at Masirah. This was the primary net that connected all the moving pieces. It included satellite, UHF and HF frequencies, plus telephone connectivity back to Washington. *Command Net Bravo* provided command and control from JTF Headquarters to the various force elements, regardless of where they were. This was the NSA network, which ran from Fort Meade through landline to the JTF, to the JTF headquarters in Wadi Kena. This net also provided information on all early warning SIGINT hits from Iran, and forwarded information to the elements on the ground. *Command Net Charlie* provided intra-theater command and control, and served as a key link between those force elements not possessing the UHF satellite capability. The CIA operated this network; it fed inputs from their regional headquarters in Virginia, to the JTF headquarters in Wadi Kena. Finally, *Command Net Delta* provided the basic redundant capability and could serve as a primary path when desired. This was the emergency net to fill in for any of the first three that went down (Lennahan, 1998, pp. 120-122). In addition, operators carried portable HF radios. The overall communications platform relied on UHF satellites as the principle means.

Even though this highly technical communications system and network was in place, the operational restrictions and OPSEC requirements impeded the proper use of this designed network. Communicators on the ground at DESERT ONE and aviators in flight could not effectively communicate with any of these nets. The redundancy in networks was there, but it did not allow room for the connectivity between elements. Other examples of the technical systems critical to the operation were the tactical light beacons being used for the first time by the USAF Combat Control Teams to light up the airfield; motorcycles for speed during emplacement; the use of NVGs by the pilots as well as the assaulters; the use of minesweeping helicopters with internal fuel blivets for their lift capability and range; the use of new Forward Area Refueling Points (FARP) systems out of tanker aircraft into helicopters, and the use of special cutting tools and demolition charges for entry access into the embassy grounds by Delta operators.

Overall, in this first phase of the operation the JTF had to establish a raiding force capable of assaulting the objective successfully, something that had never been done before by a U.S. counterterrorist force. It also had to create and assemble an air component composed of fixed wing and helicopter aircraft to support the operation. They had to be able to fly long range, at night through mountainous high-risk environment and arrive on target with surgical precision. They had to be able to conduct refueling operations from KC-130 and C-130 tanker aircrafts, and they had to be heavy-lift type aircraft in order to support the fuel and personnel load requirements. In addition, they had to be capable of landing and taking off from clandestine airstrips under blackout conditions and conduct refueling operations with helicopters. Intelligence requirements generated the need for two survey teams to conduct clandestine reconnaissance; two teams had to be assembled and infiltrated undetected into Iran to conduct reconnaissance prior to the operation. A combat search and rescue element had to be formed to provide coverage throughout the operations, including the reconnaissance missions. In addition, the Ranger security force had their set of collective tasks regarding the airfield seizure and blocking positions along the roads at DESERT ONE.

3. Phase II: Approach and Assault

The following diagrams for Operation EAGLE CLAW show the flight routes for day one and day two respectively, and the accident at DESERT ONE:



The rescue operation called for six MC-130's to transport the assault into Iran to a remote desert landing strip named DESERT ONE, located 265 nautical miles from Tehran. Simultaneously, eight RH-53 helicopters, with Marine pilots, would launch from an aircraft carrier in the Arabian Sea and rendezvous with the other elements at DESERT ONE (Mis, 1998, p. 3). At DESERT ONE, the assault force would transload into the helicopters, while the helicopters refueled. Afterward, the helicopters would transport the assault element to a remote mountain location fifty miles from Tehran, where they would

remain concealed until darkness fell again the following night. The intent was to infiltrate the target area by vehicles⁶⁴ under the cover of darkness and storm the embassy. During the post assault phase, the RH-53 helicopters were scheduled to fly to the embassy and recover the hostages and the rescue element. From there, they would fly to another airstrip at Masirah, thirty-five miles to the south, already secured by a Ranger security team. There, C-141 aircrafts would land, and all personnel would transload for their return flight to freedom. One of the contingency plans known as PYTHON FORCE consisted of 90 Force Recon Marines led by Major Oliver North; they were prepositioned in the eastern sector of Turkey as a backup extraction element, ready to intervene if any of the helicopters or the assault element became trapped (Bolger, 1988, p. 126).

4. Phase III: Post Assault

The operation never made it past DESERT ONE. All remaining personnel were transloaded into the remaining C-141 aircrafts to return to their home stations, without ever attempting a follow up rescue. Planning for a second rescue continued for the remaining part of the year, but no follow on rescue was ever attempted. Eventually, all hostages were released minutes after President Reagan was inaugurated into office in 1980. The total duration for the hostage siege was 444 days.

D. PRINCIPLES FOR HOSTAGE RESCUE OPERATIONS

1. Intelligence

Extreme OPSEC measures were detrimental to the overall execution of the operation. None of the operational elements was allowed to speak to one another or to take notes and keep written products during the planning process. OPSEC measures were completely violated at DESERT ONE, by abandoning mission capable aircraft with classified intelligence documents and communications cryptology still inside, without destroying any of it prior to exfiltration.

The complexity of this operation required a high degree of intelligence assets and personnel to process it. Initially the JTF only had one assigned intelligence officer; later three more intelligence officers were added. Still, the ad-hoc nature of the JTF and the lack of coordination with other intelligence agencies coupled with inter-agency rivalries, proved to be fatal in coming up with an executable plan. The lack of intelligence and

⁶⁴ American operatives inside Tehran (pilot team) had already commandeered these vehicles.

HUMINT sources in Iran added to the environmental uncertainty of the JTF. Two survey teams were launched by clandestine means prior to the operation: one survey team with a combat controller from the Air Force to survey the landing strip at DESERT ONE and place landing lights, and another survey team to survey the actual grounds in Tehran and prepare a welcoming committee with vehicles. Both of these operations were highly dangerous and proved to be very successful, but the intelligence collected during these operations was not disseminated.

The weather conditions were critical in adding uncertainty during the operation, specifically for the pilots, increasing the difficulty of flying under such conditions. The uncertainty of the condition in which the hostages were in as well as an increasingly hostile attitude by the government of Iran, added to the volatility of the environment, thus precipitating the President's decision to act. No one really knew the condition of the hostages. The lack of contingency rehearsals added uncertainty during the infiltration phase. The inexperience of the Marine pilots being placed in an uncertain environment that was inevitably hostile, and expected to conduct a high-risk, high skill level task with little or no preparation, was a recipe for failure.

2. Surprise

The element of surprise during EAGLE CLAW was never considered as a principle to provide leverage and achieve operational superiority over the enemy. Throughout all phases of the planned operation, there was an ever-present feeling of wishful thinking, hoping that each stage of the phased infiltration would work and that none of the elements would be compromised.

Surprise was lost as soon as the rescue elements landed on DESERT ONE. Immediately upon arrival, the Ranger security element had to open fire on a passenger bus, creating large fires and explosions in the middle of the desert; surprise was impossible to recover after that one incident. In addition, a vehicle infiltration into the target area, in the middle of Tehran, is considered an emergency deliberate assault. Even if everything had gone as planned, the element of surprise would have been lost immediately preventing the assault force to take any advantage of it.

The principles of hostage rescue operations are very closely tied together; they depend on one another in order for the operation to work. The proper intelligence was not available to provide a good deception plan that would allow the assault force to surprise the enemy. This concept was gravely misunderstood by JTF 1-79.

3. Operator's Skills

One of JTF 1-79's biggest failures was the inability to match the technical systems to the operator's skills. In reality, General Vaught misused the robust communications package due to the OPSEC restrictions and the inordinate control of mission execution. The new systems for the helicopters and the lack of experience of the Marine pilots caused great uncertainty, especially flying with night vision devices (NVDs); pilots complained of vertigo and could not see each other through the dust clouds. JTF 1-79 failed to anticipate the proper number of aircraft required to conduct the operation by not taking into consideration the failure rates for the helicopter force. A force of 8 helicopters was launched on mission day from the USS Nimitz, in hopes of having 6 helicopters arrive at the target site. By doing a simple probabilistic analysis⁶⁵ for the helicopter force, using helicopter data and actual success ratios, we can calculate that in order to have 6 operational helicopters at the target site (assuming an optimistic 80% reliability for each helicopter and a 95% probability of overall success), the JTF should have sent at least 10 helicopters. The JTF also failed to anticipate changes in the environment by not having contingency plans to respond to the changing weather and aircraft mishaps. A fatal error for the rescue operation was that no full dress rehearsals took place. "Disparate groups of different units cobbled together in haste attempted to synchronize their work literally on the fly" (Carney and Schemmer, 2002, p. 100). The very last rehearsal conducted by anyone in the raiding force had taken place three weeks prior to the operation. Each element conducted its own rehearsal, but the force never got together as a whole. It was assumed that everyone would do his job and get to DESERT ONE and to the objective on his own. Many changes were made during the last three weeks prior to the operation, especially with the air movement. The communications plan between elements was completely flawed; the operators and the C-130's were the

⁶⁵ Taken from the probabilistic analysis conducted by Captain Wayne Hughes, Jr., USN Department of Operations Research, Naval Post Graduate School, 8 September 1981, and discussed with Professor Giordano in the SO 3410 course during the Spring of 2003.

only elements with secure communications capability. To make matters worse, there was no bump plan in place in case of aircraft failure.

The very nature of a hostage rescue operation is a highly technical and complex endeavor. It takes specially selected and well-trained individuals who are self-reliant and can operate well under pressure. Special Operators cannot be mass-produced overnight; it is a long process of training and dedication to reach the level of professionalism required by JTF 1-79 personnel. Delta Force had been activated only a few hours prior to the hostage situation. Colonel Beckwith was alerted to the hostage situation on his way back from Delta's final culmination and capabilities exercise (CAPEX). This operation would be their validation and the opportunity for Colonel Beckwith to show off his new force. Each component of the force conducted a series of rehearsals throughout the planning phases of the operation. Delta Force conducted over 90 rehearsals. Overall, there were only seven combined rehearsals, each involving only a few of the components from the rescue force.

The members of the newly formed Delta Force had just been officially certified and had tremendous pressure to excel and prove themselves as the world's number one counter terrorist force. On the other hand, the helicopter crews lacked the internal drive and pressure to excel. The pilots and crews did not waste any time when it came time to abort the operation. They failed to adapt to a complex environment and continue with the operation. The pilots for the helicopter force received highly specialized training. Flying at night with NVDs still was considered a dangerous operation, one rarely done by any aviator. Pilots had to train extensively flying with NVDs. The initial group of helicopter pilots had come from the Navy; after several rehearsals, the whole group was disbanded due to their inability to fly at night. Col Beckwith and Col Kyle later would recruit Marine pilots to replace the Navy pilots. Some would argue that the Marine pilots were given the mission only in order to have representatives from each service within the JTF.

The Marine pilots had to go through a train up phase to become familiar with the new technology as well as with new helicopters. RH-53D minesweeper helicopters were reconfigured and outfitted with fuel blivets for the extended flight to Tehran. Marine pilots had to get used to flying these aircraft for extended periods, while under strict radio

silence, limiting their ability to check with one another. The JTF planners overestimated the ability of the helicopter pilots in accomplishing the mission. The pilots had trained together as a group for a period of only five months with new equipment and helicopters, and it was assumed that this training would be enough.

Not only did they not take care of them, but also the strange helicopters did not belong to them, they actually used them as “hangar queens”—cannibalizing them for spare parts (Snook, 2000, p. 137).

Col Beckwith identified this as a critical flaw in the plan in the very early stages of the planning phase, but he “wished” the problem away and figured it would eventually get resolved. In addition, the assumption was made that since communications would only be conducted during emergencies, critical secure satellite communications equipment (SATCOM) was removed to reduce weight inside the aircraft. The contingency plan for this was a series of signals developed by the crew chiefs (flashing lights and hand signals), which were useless in low visibility conditions. The JTF overestimated their abilities by not looking back at previous operations and seeing what worked then, as in the case of the Son Tay raid ten years prior. They failed to learn from previous experiences.

The fixed wing pilots also received specialized training. The refueling operations from KC-130 fuel tankers to helicopters in a clandestine airfield had never been done before. Other options were explored, trained for, and tested, as in the case of airborne heavy drops with fuel blivets, but these proved too unpredictable. Landing on a desert airstrip that had been surveyed five weeks prior, without knowing what condition the airstrip was in at the time of arrival, also had a big impact on the skill set and training for the pilots.

4. Deception

The deception plan for the operation was non-existent. Deception for JTF 1-79 was only seen as a means of survivability, by camouflaging helicopters and utilizing minesweeper equipment in order to eliminate their signature and preserve OPSEC. The only resemblance of any deception plan was used by the advance party elements already in country, pre-staging the vehicles to be used by the assault force. Their deception plan was based on survivability and not linked to a surprise attack. With advance

reconnaissance elements already operating around the target area, it would have been a perfect opportunity to devise a distraction or some sort of a ruse to aid in the covering the assault force's infiltration. Deception allows operational leverage for the assault force, and it gives them the opportunity to surprise the enemy, based on accurate intelligence. None of these factors were at play during the operation.

E. CONCLUSION

At the conclusion of Operation EAGLE CLAW, and towards the end of 1980, the Department of Defense established the Holloway Commission⁶⁶ in an effort to examine what went wrong with the operation and make improvements and recommendations to prevent another disaster of this magnitude. Twenty-three issues were identified and investigated as a result of the operation, and eleven of these were categorized as having a direct impact on the outcome of the operation. Colonel James H. Kyle lists four of these findings as critical in the failure of the operation. First, alternate helicopter pilots (USAF Special Operations or Rescue Service H-53 pilots) should have been selected to team with Marines. Second, helicopter aborts—pilots lacked certain knowledge vital to reaching an informed decision whether to abort or to proceed. Third, enemy radar threat—helicopter pilots based low-level tactics on erroneous intelligence reports. Fourth, helicopter communications—pilots lacked secure modes of communication to receive vital mission information (Kyle, 1995, p. 365). In the end, the Holloway Commission determined that the overriding cause for the mission abort was an unexpected helicopter failure rate and low-visibility flight conditions en route to Desert-One (p. 365).

While overconfidence in one's abilities seems to be one of the most overwhelming common denominators in most of SOF failures, in the case of DESERT ONE it was the lack of confidence of the helicopter pilots that caused the decision to abort. The inexperience of the Marine pilots flying the helicopters, the mechanical failures of the helicopters, and the reluctance of the pilots to continue and complete the mission, were the root problems of why the operation was called off. Colonel Beckwith

⁶⁶ The Holloway Commission, named after its chairman retired Admiral James L. Holloway III, was created to examine the organization, planning, coordination, direction, and control of the Iran hostage rescue mission with an eye towards recommending improvements in these areas for the future (Kyle, 1995, p. 363).

did not exhibit overconfidence when it came time to stick to his abort criteria of no less than six helicopters, based on labor and the tasks to be accomplished by his operators. This is actually the overall theme for Colonel Kyle's book *The Guts to Try*⁶⁷. At the end of the book, he mentions that the mission could have been completed if the helicopter pilots had had the guts to try.

F. BIORHYTHM OF OPERATION EAGLE CLAW

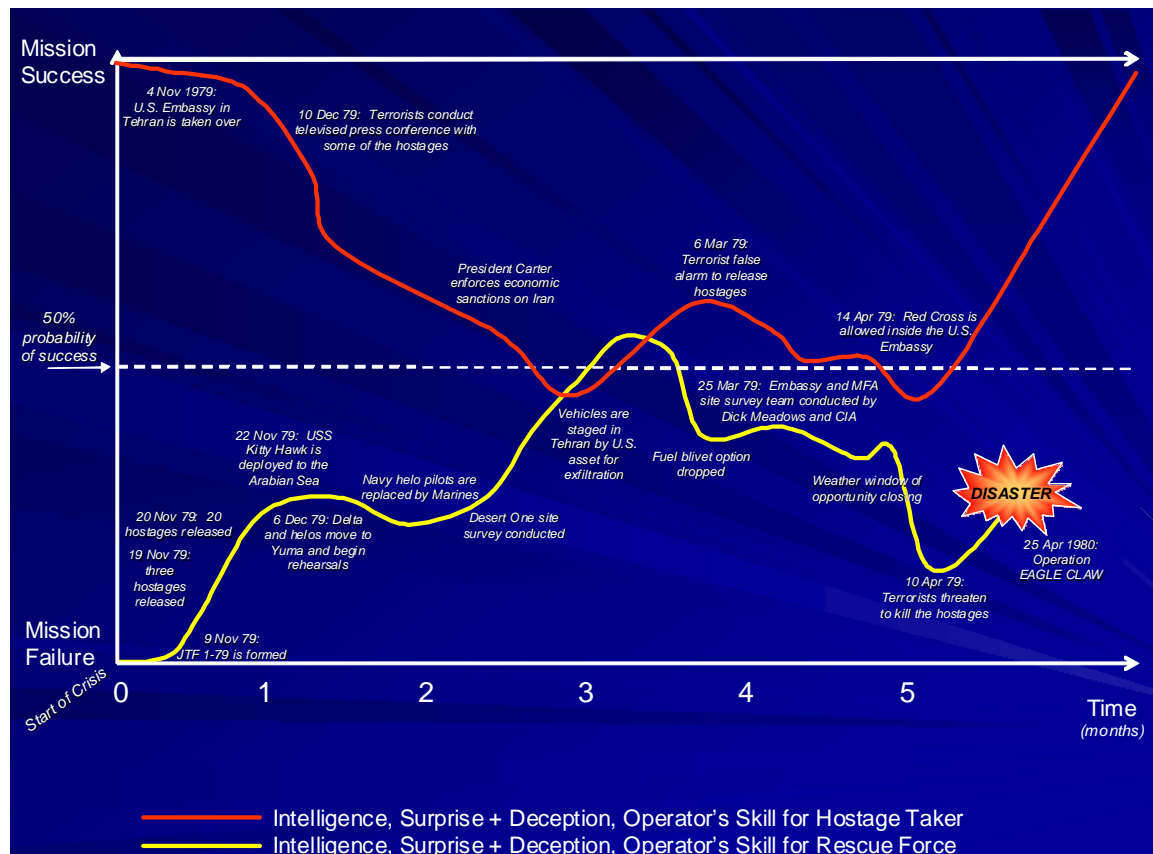


Figure 41. Author's Representation of Operation EAGLE CLAW's Biorhythm

Operation EAGLE CLAW did not follow the principles proposed in this thesis, nor did it track the operational biorhythm for the crisis as it related to intelligence, surprise, operator's skills, and deception; these factors were not understood or tracked by anyone in the JTF. In the end, the failure at DESERT ONE helped expose some critical shortcomings in the U.S. Armed Services and its organizations regarding combating

⁶⁷ "To you all from us all for having the guts to try" was the note left on two cases of beer given to the JTF 1-79 personnel by British mercenaries serving in the Omani Air Force, after the disaster.

terrorism operations. The organization of JTF 1-79 gave birth to the concept of Joint Operations. In the fall of 1980, the Joint Special Operations Command (JSOC) was created from the recommendations of the Holloway Board. In 1982, the 1st Special Operations Command (SOCOM) was created at Fort Bragg, fielding a third Ranger Battalion and a Ranger Regimental headquarters. In the following two years, TF 160th Special Operations Aviation Regiment, the 96th Civil Affairs and the 4th Psychological Operations Battalions, as well as other Special Forces Groups and USAF Special Operations Wing were activated, all as a result of DESERT ONE (Lennahan, 1998, pp. 200-202).

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IX. SHORT CASE STUDIES

A. DE PUNT TRAIN HIJACKING; HOLLAND, MAY - JUNE 1977

1. Background and Case Study

On 23 May 1977, a group of nine South Moluccan terrorists seized a train traveling between Assen and Groningen, in northern Holland, while another four occupied a nearby school in Bovensmilde. Fifty-one people were held hostage on the train and 110 inside the school (Harclerode, 2001, p. 280). The terrorists demanded the South Moluccan independence from Indonesia; they also wanted the release of several South Moluccans held in Dutch jails as well, and they wanted an airplane. To emphasize their demands, they shot the train driver and dumped his body on the tracks.

Negotiations lasted almost three weeks, in which time the South Moluccans released all but four of the hostages at the school and several hostages at the train. Dutch authorities devised an ingenious plan to gain the children at the school. They laced the food to be delivered to the children with a mild virus, causing an epidemic inside the school and giving all the children a terrible case of diarrhea. With the situation out of control, the terrorists were forced to release the children.

At the train however, the situation had deteriorated terribly. The terrorists were becoming very impatient at the lack of response to their demands. Meanwhile, members of the Dutch Marines of the BBE (Bijzondere Bijstandseenheden – Special Support Unit), swam across a canal near the train and placed technical surveillance equipment to monitor conversations and pinpoint the exact locations of the terrorists. They also placed explosives in the front of the train to be used as a diversion during the upcoming assault. Police officers dressed as Red Cross personnel to deliver food to the train gained further intelligence. Intelligence was also gathered from the released hostages who were thoroughly debriefed by the police authorities. The BBE had a detailed picture on how many terrorists there were, what weapons they carried, how many were on guard at a given time, and the specifics on the train.

By 10 June 1977, negotiations were at a stand to, so the decision was made to launch a simultaneous assault on the train and at the school. At 0435 hours, F-104 star

fighters from the Royal Netherlands Air Force flew right over the train and kicked straight up, using their afterburners to create a distraction for the terrorists while the assault force moved in. The whole train shook from the vibration caused by the jets, and the hostages all went for some kind of cover. Snipers provided covering fires, acquiring selected targets as the assault force proceeded to blow the train doors and scale the sides of the train. The diversionary charges placed earlier on the front of the train were set off, and the BBE assault element stormed the train. Seven terrorists were killed and two surrendered. Two hostages were killed in the firefight accidentally when they disobeyed orders from the BBE marines to lie down. The whole assault lasted only minutes and was a complete success. Meanwhile at the Bovensmilde school, another contingent of the BBE marines assaulted the building in armored vehicles and successfully rescued all four hostages, capturing the four remaining terrorists (p. 282).

2. Principles for Hostage Rescue Operations

a. Intelligence

The BBE marines and the Dutch authorities maximized the use of the negotiations process to gain time and gather intelligence. They successfully debriefed all released hostages in depth, gathered special reconnaissance using undercover porters to deliver food, and used special teams to infiltrate and get close to the target to emplace technical surveillance equipment to pinpoint the terrorists and their intentions. The BBE used their sniper-observer teams effectively well in advance; they provided eyes on the target continuously and provided effective cover up to the point of execution, by giving last minute intelligence reports over their radios.

b. Surprise

The element of surprise was gained through the effective use of a well-developed deception plan, excellent operator's skills, and a synergistic approach to intelligence. The use of F-104 aircraft to shake and rattle the train with afterburners completely disoriented everyone on the train, causing all the hostages to lie down on the floor in fear for their lives. The use of sniper fires, diversionary demolition charges in the front of the aircraft, and a carefully positioned assault force with the right breaching charges, all acted in concert to give the assault force the maximum element of surprise.

c. Operator's Skills

Members of the BBE marines are highly skilled operators who know their business. They constantly train and rehearse these types of high-risk operations, and are well versed in the use of a myriad of weapons in close battle. Once the members of the assault force entered the train, they engaged the threat discriminately, selecting targets and eliminating seven terrorists. They did not hesitate in eliminating two hostages when they refused to abide by the BBE's instructions. The BBE had complete control of the situation from start to finish; the assault lasted only several minutes with complete success.

d. Deception

Deception was achieved during all phases of the operation: from the initial deception with the food poisoning of the school kids, to the use of undercover cops to gather intelligence, the explosive charges to create a diversion, to the extraordinary use of jets to completely rattle the terrorists. The deception plan allowed the BBC marines to approach the train surreptitiously without being compromised. It gave the assault force the opportunity to exploit absolute surprise over the terrorists during the assault. Finally, the deception plan with the food was directly responsible for the safe release of the children at the Bovensmilde School.

3. Biorhythm

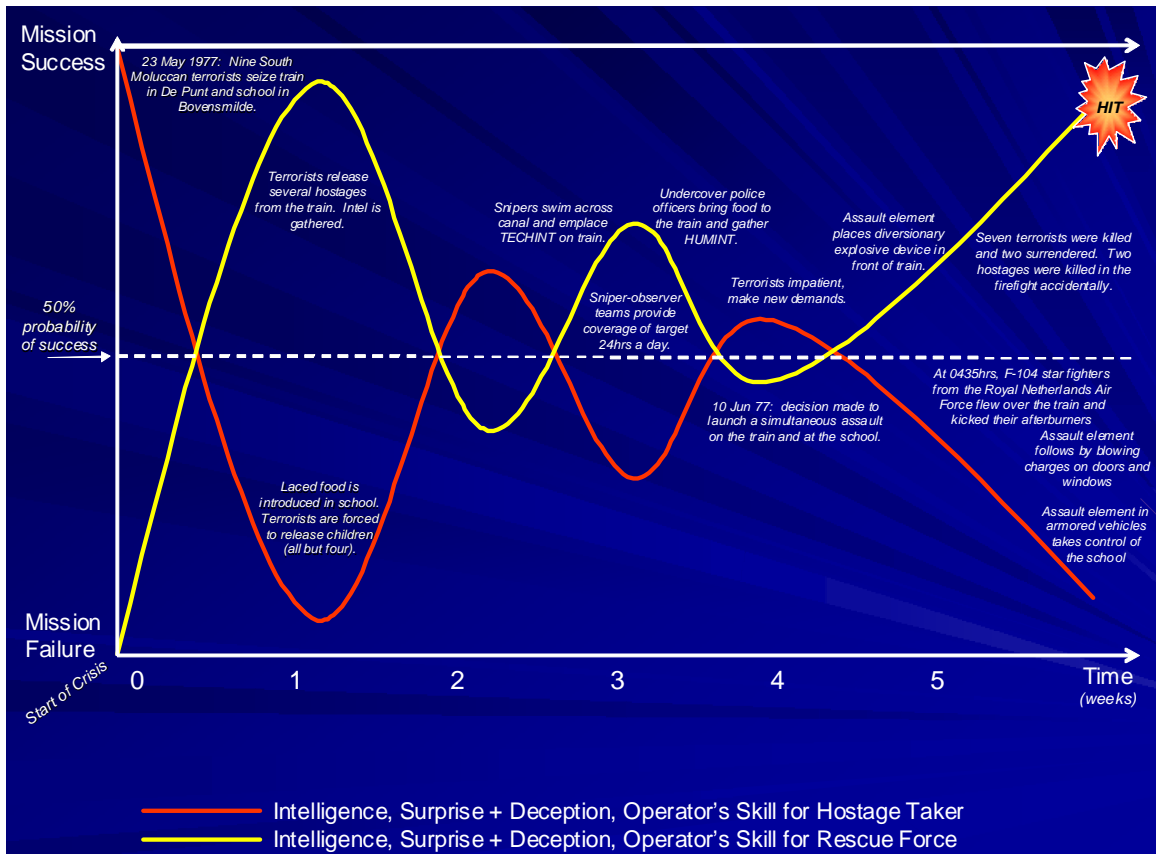


Figure 42. Author's Representation for the De Punt Train Rescue Biorhythm

B. MUNICH OLYMPICS MASSACRE, (GERMAN POLICE, SEPTEMBER 1972)

1. Background and Case Study

On 5 September 1972, eight Palestinian terrorists from the Black September faction, held nine Israeli athletes hostage in exchange for the release of 232 Arab prisoners held by Israel, as well as two known German terrorists. They stormed the Olympic Village in Munich by climbing over one of the perimeter fences during the early morning hours and raiding the apartment building that housed the Israeli contingent. In the process, they killed two Israeli athletes (Moshe Weinberger and Yossef Romano) and were able to hold hostage nine more.

The Black September terrorists had been planning the operation for months. At approximately 0400 hours on the morning of the siege, the masked gunmen made their way to #31 Connollystrasse at the Olympic Village Apartments. They successfully

entered the apartment, taking five Israeli team members hostage: track coach Amitzur Shapira, fencing master Andrei Spitzer, rifle coach Kehat Shorr, weightlifting judge Yacov Springer, and Yossef Gutfreund (Calahan, 1995, p.2). The terrorists then moved around the complex looking for more Israelis, successfully apprehending six more in apartment #3. During the initial struggle, wrestling coach Moshe Weinberger and weightlifter Yossef Rommanno were shot with a Kalashnikov assault rifle, killing them both.

Aside from the initial struggles and the shots fired, very few people at the Olympic Village noticed what had transpired. Eventually, two Israeli athletes who had escaped the assault, alerted the German authorities to the incident. During the next hour, the Black September terrorists issued their demands and threw the body of Moshe Weinberger into the street. In addition to the release of the Arab and German terrorists, they requested an airplane for their escape plan. Manfred Schreiber, the Munich Police Commissioner, became the de-facto command authority over the hostage incident (p. 3). The German negotiators successfully extended three deadlines throughout the day. Schreiber finally concluded that a rescue attempt was the only solution to the siege. Initially, police rescue units dressed as athletes attempted to conduct an emergency-deliberate plan of action. Their efforts were quickly aborted when they realized their plan had been exposed on the local news, which the terrorists could see on the television inside their room. Schreiber concluded that the best option was to isolate the terrorists at the airfield and attempt to intercept them on their way to the aircraft at Germany's Furstenfeldbruck Airport. Israeli Special Forces units from the Sayeret had offered assistance in mounting a rescue, but this was denied by the local state officials.

At the airfield, eight German police officers dressed in Lufthansa flight and cabin crew uniforms. However, because of a shortfall, several officers were forced to wear Lufthansa shirts with what were obviously standard police-issue trousers. This small squad was tasked with securing the aircraft and ambushing the terrorists once inside. After discussing the mechanics of their ambush, the officers decided their portion of the plan was too dangerous to execute, and decided on their own to abort the suicide mission (Reeve, 2000, p. 109). With the helicopters already inbound, the deputy commander for

the Munich police, Georg Wolf, was left with the only option of attacking the terrorists with the five men sniper team, while the terrorists made their walk from the helicopters to the aircraft.

Five German snipers who were responsible for initiating the assault were prepositioned at the airport. However, it was not until the helicopters with the terrorists and the hostages arrived at the airfield for the transload, that the German authorities realized there were eight terrorists and not five as anticipated. The snipers did not have communications equipment and could not relay this information to the rest of the German assault force waiting by the air terminal. In addition, the lighting at the airfield was shut off, and the only floodlights used by the Munich police were all pointing at the airplane. With very little time to reposition themselves, the sniper element was stuck with very poor site selection. One helicopter landed less than fifty yards away from one of the snipers (p. 111).

As the terrorists moved away from the helicopters to inspect the aircraft, Schreiber ordered the snipers to open fire. The sniper shots missed their intended targets, and a firefight ensued at the airfield. The Israeli hostages were still tied to their seats inside the two helicopters, with several of the terrorists keeping guard. The firefight lasted approximately 80 minutes; German police armored vehicles were called on to the scene to try to resolve the deadlock at the airfield. When they arrived at the airfield, the terrorists panicked; one terrorist came out of his helicopter and sprayed the Israeli athletes inside with his Kalashnikov; he followed this act by throwing a hand grenade inside the helicopter, blowing it up in a giant ball of flame, burning the five Israeli athletes still bound inside. German police decided to conduct a full on infantry style assault on the terrorists. As the assault element moved forward, another terrorist came out of the second helicopter and opened fire on the remaining four hostages still tied in the helicopter. The firefight continued with the armored vehicles opening fire sporadically, seriously injuring two snipers thinking they were terrorists (p. 122). At approximately 0130 hours, the firing ended. All the hostages, five terrorists and one police officer were killed. The remaining three terrorists survived and were arrested at the airfield.

2. Principles for Hostage Rescue Operations

a. Intelligence

Intelligence operations during the hostage siege at the Olympic Village were not employed properly. Even though the initial negotiations process was stalled during three different occasions successfully, no effort was made by the German authorities to exploit this advantage and utilize TECHINT or HUMINT assets during the standoff. The German police effectively bought time but did not exploit this advantage. They attempted to conduct an emergency-deliberate plan of action without considering employing TECHINT means first in order to find out the basic information requirements inside the target area. They did not know until the execution phase of the operation, that there were eight terrorists and not five as had been assumed all along. This was a critical failure directly attributed to a lack of intelligence efforts.

b. Surprise

The element of surprise was considered by the German police, but did not work effectively because of the lack of intelligence about the terrorists and mediocre operator's skills. The German authorities understood that surprise was critical for the safe release of the hostages; it was considered during the initial emergency assault, during the delivery of food to the apartment, and during the planned ambush at the airfield. No HUMINT or TECHINT was employed in the Connollystrasse apartments at the Olympic Village to pinpoint how many hostages and terrorists were inside the room. During the negotiations process, Manfred Schreiber, the Munich Police Commissioner, was concerned only with ending the siege as fast as possible and not drawing out the process to gather intelligence. The efforts of the German authorities to control the situation throughout all the conversations with the terrorists were opportunities not exploited.

c. Operator's Skills

The German authority's CT capability was in its infancy at the time. The Israeli experts in counterterrorism offered help throughout the crisis, but it was refused several times. The tactics, techniques, and procedures of all personnel within the rescue element were completely below the standard of a seasoned CT national level asset. The sniper-observer teams were not properly equipped or trained in target acquisition at nighttime, nor did they have communications equipment. Some of the sniper weapons

were not even fitted with telescopic sites, and none had infrared or thermal sites (Reeve, 2000, p. 116). They did not have proper firing positions or direct line of sight with the terrorists; instead, the pilots and aircrew were in their way. As the firefight broke out, a police officer standing at the base of the air traffic control tower was shot in the head by one of the terrorists, as he tried to support the sniper element with a sub machinegun. Nevertheless, the worst mistake for this element was having only five snipers for eight terrorists. After several investigations covering the disaster, it was determined that some of the Israeli hostages were killed by the Germans' erratic gunfire.

The concept of an open-air option to end a hostage siege is a high-risk option considered in hostage rescue operations. For this specific reason, it is considered only when the skills of the sniper elements are highly effective, and the unit is very comfortable with its standard operating procedures responding to contingencies. The order should never have been given to open fire once it was determined that there were eight and not five terrorists holding the Israelis. The plan should have been aborted and another option considered. To make matters worse, the chaos that ensued during the firefight and the mad infantry attack by the assault element show a lack of discipline and expertise by all in the assault force. The safety of the hostages was of secondary importance to the German authorities at the time; the focus was to kill the terrorists.

Six months after the disaster at the airfield, the Germans vowed they would not be taken by surprise again and authorized the creation of the Grenzschutzgruppe 9 (GSG-9 or Border Protection Group) counterterrorist unit, which was deemed operational in April and was responsible for the success of operation FIRE MAGIC in 1977 (see case study D).

d. Deception

Similar to surprise, the deception principle was considered, but only as a quick means to end the siege. The deception plan was not synchronized with the rest of the rescue operation and was not tied into the intelligence collection or tactical assault plan. The first deception effort came with the emergency assault plan, by dressing the police officers in athlete's outfits. The police chief considered a different approach by sending five undercover police officers to deliver meals to the terrorists, in hopes that they could storm the terrorists once they came out to pick up the food. This did not work

because the terrorists never allowed the officers to come close to the apartment. At the airfield, the airplane used was a dummy aircraft and the personnel dressed as Lufthansa crewmembers did not have the complete uniforms to make their plan believable. When the men on the plane decided to abort their portion of the plan, the rest of the operation fell to pieces (Reeve, 2000, p. 112).

There was no diversion planned during the most critical event in the operation—the transload from the helicopters to the airplane. The deception during this phase should have been centered in trying to separate the terrorists from the hostages, specifically when considering an open-air option. Overall, some deceptive measures were considered but not synchronized properly with the rest of the hostage rescue principles and the overall tactical plan.

3. Biorhythm

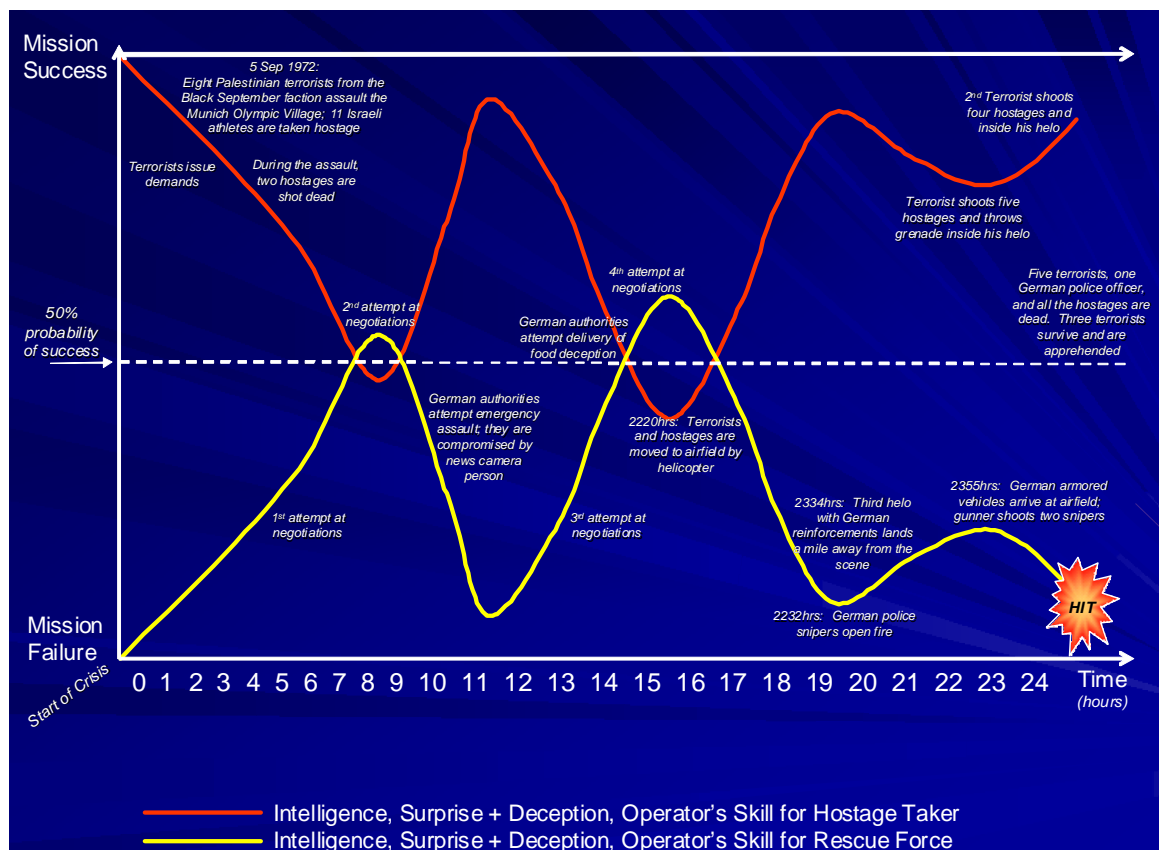


Figure 43. Author's Representation of the Munich Olympics Biorhythm

C. EGYPT AIR FLIGHT 648 AT MALTA: EGYPTIAN SPECIAL FORCES (FORCE 777, 1978)

1. Background and Case Study

The increasing threat within the country of Egypt and from Libyan-backed Middle Eastern terrorist groups prompted Egypt to create its own counterterrorist unit. Egyptian intelligence was receiving indicators from groups such as the Abu Nidal Faction and Popular Front for the Liberation of Palestine vowing to take violent action against Egyptian targets and people (specwarnet.net/world/ct.htm on 20 January 2004). In 1977, a small volunteer group was formed out of the ranks of the Egyptian Army's As-Saiqa special forces; Egypt's predecessor to Force 777 was created (Harclerode, 2001, p. 297). Initially, the unit was staffed by three officers, four NCOs, and forty operators. Their first targets were against terrorist training camps along the Libyan border.

It was not long before the As-Saiqa saw its first hostage rescue crisis. On 18 February 1978, two members of the Popular Front for the Liberation of Palestine (PFLP) shot dead an Egyptian news editor, Yusuf Sebai. They were protesting a recent peace mission to Jerusalem by Egyptian President Anwar Sadat (p. 297). After a short siege inside a hotel, the terrorists demanded a plane to fly them to Cyprus, together with 15 hostages. Cypriot authorities conceded; after flying around in a DC-8 with nowhere to land, the aircraft returned to Cyprus with the 2 terrorists and 15 hostages. Cypriot authorities quickly surrounded the aircraft together with their national guard. As-Saiqa was dispatched to assault the DC-8 and flown to Cyprus. With little experience and short on time, As-Saiqa developed an emergency-deliberate plan of action during the one hour flight; they were completely unprepared for the operation. To add to the confusion, the Egyptian Ministry of Defense neglected to inform the Cyprus authorities of As-Saiqa's imminent arrival. When their aircraft landed, the entire assault force, dressed in civilian clothes, began their assault towards the DC-8 (p. 298). The Cypriot authorities assumed that As-Saiqa were reinforcements for the PFLP, and engaged them in an 80-minute firefight. Fifteen As-Saiqa died because of the mishap.

In 1978, Force 777 was created out of the ranks of the now infamous As-Saiqa counterterrorist unit. On 23 November, four members of the Egyptian Liberation Organization hijacked an Egyptair Boeing 737, flying from Athens to Cairo (p. 298).

Palestine Radicals, angered over Egypt's failure to protect the fleeing Achille Lauro terrorists, seized Egyptair flight 648 (ironically, the same airplane that had been used to transport the Achille Lauro terrorists out of Egypt) and flew it to Luga International Airport in Malta. This time, Egypt made sure that the foreign government knew Force 777 was coming (specwarnet.net/world/ct.htm on 20 January 2004).

By the time Force 777 had arrived at Luga, five hostages had been shot, two Israelis and three Americans, and their bodies thrown on the tarmac. One of the Israelis died, but the others survived (Harclerode, 2001, p. 299). During the short period of negotiations with the Maltese authorities, Force 777 failed to perform any surveillance of the ground situation or to debrief any of the released hostages. They had no idea of the location of the terrorists, their weapons, or the terrorists' physical characteristics. Force 777 also failed to look at aircraft blueprints or the operational condition of the aircraft. When negotiations failed, the commander of Force 777 immediately began deploying his snipers and moving his assault force element towards the aircraft. Without stun grenades or other essential equipment for CQB, a six-man element took position under the aircraft, while others climbed onto the wings (p. 299). In order to stun the terrorists and gain time for operators to enter through the breach, the explosive charge used was doubled. The charge was so powerful that it destroyed six rows of seats killing approximately twenty passengers. Then members from the wing team entered through the doors and for some unknown reason began throwing smoke-grenades and firing indiscriminately. Snipers positioned on top of rescue vehicles began firing at fleeing civilians. The terrorists, already warned by the noises under the aircraft prior to the explosion, threw grenades down in the breach hole and fired their weapons at the assaulters. During the firefight, the rear of the aircraft caught fire suffocating many of the hostages. In all, the botched operation killed 57 hostages. Three of the terrorists were killed, but the fourth survived (p. 300).

2. Principles for Hostage Rescue Operations (For Flight 648 at Malta)

a. Intelligence

Force 777 made some very fundamental mistakes in their plan. A hostage rescue operation on an aircraft is very complicated and requires at minimum specific information requirements and peculiarities of the aircraft. Force 777 did not exploit the

time afforded by the Maltese negotiator to look over basic intelligence requirements such as blueprints, aircraft status, location of the terrorists, location of the hostages, and what sort of weapons the terrorists were carrying. They did not take advantage of the injured hostages thrown on the tarmac for debriefing and gathering valuable information. Force 777 deployed their sniper-observer teams at the same time as the assault force element, denying themselves the capability of the snipers providing initial intelligence of the target area, covering fires for the approach, or last minute intelligence during the approach to the target. Finally, they miscalculated the specific requirements for the breaching charge by not studying the blueprints and finding out how many explosives were needed to blow the door.

b. Surprise

Force 777 did not exploit the element of surprise to gain precious moments during their initial entry. They erroneously thought that a big explosion and smoke would compensate for the lack of stun grenades and that it would be enough to disorient the terrorists and give the assault force the surprise advantage. Once they entered the aircraft, Force 777 was surprised to find that six rows of seats had been blown up from their breaching charge and that over 20 hostages were dead.

c. Operator's Skills

Force 777 was not ready or capable of conducting an assault of this nature. They developed a last minute plan, and it was poorly executed. Their shooting skills and techniques inside the aircraft say little of their knowledge of CQB. The last thing needed inside a target during CQB is smoke, and Force 777 was throwing smoke grenades everywhere and shooting at anything that moved. The sniper force was undisciplined and erroneously shot at anyone coming out of the aircraft without first positively identifying them.

d. Deception

Force 777 never considered a deception plan to cover their movement to the aircraft. Their approach and pre-positioning was noisy; they gave away their position by making too much noise opening the latch under the aircraft to emplace the breaching

charge. At a minimum, they could have used some kind of diversionary tactic to the front of the aircraft in the form of noise or a fire, to distract attention from the bottom and the wings of the aircraft.

3. Biorhythm

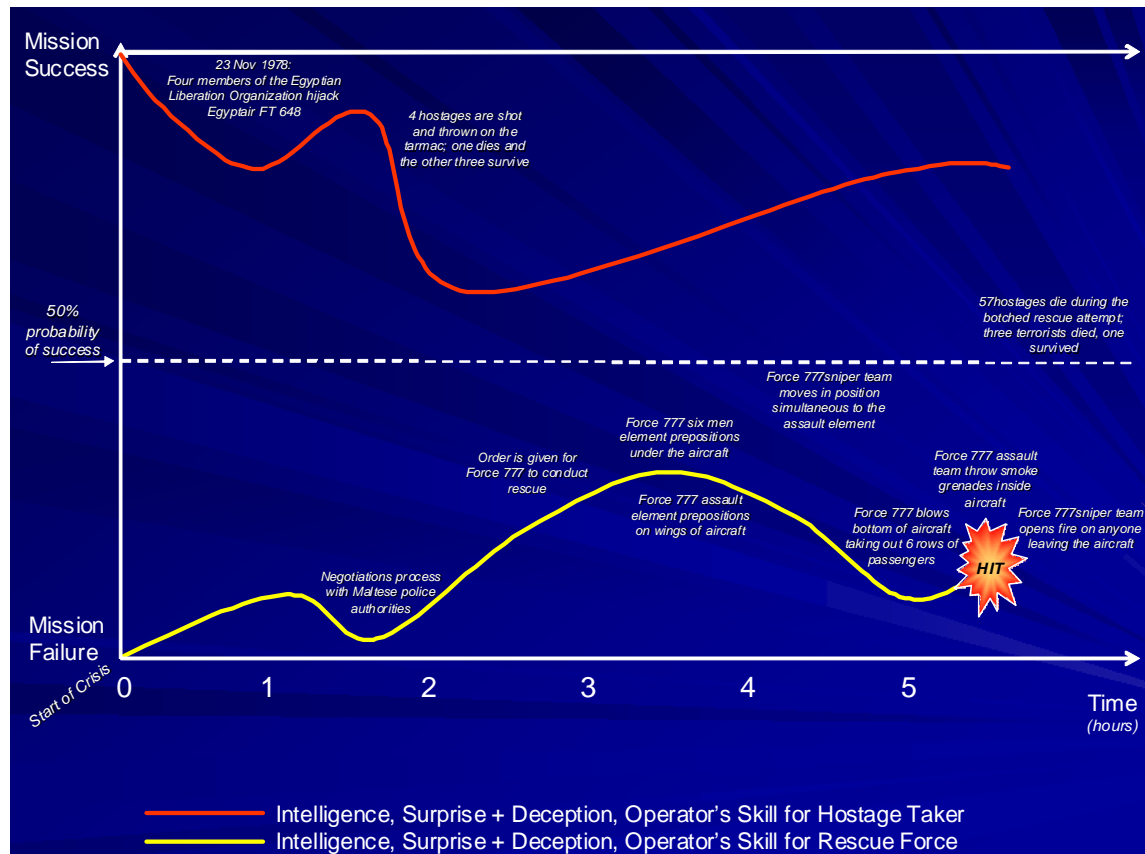


Figure 44. Author's Representation of Egypt's Air Flight 648 Biorhythm

D. OPERATION FIRE MAGIC, LUFTHANSA FLIGHT 181: MOGADISHU, SOMALIA: GRENZSCHUTZGRUPPE 9 (GSG 9, OCTOBER 1977)

1. Background and Case Study

On 13 October 1977, Lufthansa flight LH-181 from Palma in the Balearic Islands to Germany, was hijacked by four terrorists of Wadi Haddad's PFLP-SOG on behalf of the Red Army Faction over the French Mediterranean coast (Harclerode, 2001, P. 367). On board the aircraft were five aircrew (two pilots and three flight attendants), 86 passengers, and four terrorists, two of them women. Two of the terrorists were male—Zohair Yousif Akache and Wabil Harb. The other two females were Suhailah Sayeh and Hind Alameh, both of whom were armed with grenades and pistols. The terrorists' leader known as Akache ordered the aircraft captain to fly to several airports looking for fuel.

They first landed at Rome's Leonardo da Vinci airport at 1545 hours. Their demands were the release of eleven members of the Red Army Faction and two Palestinians jailed in Turkey and their transportation to South Yemen, Somalia or Vietnam, and U.S. \$15 million (p. 368). After refueling, the LH-181 takes off again at 2250 hours and lands at 0152 hours the next morning in Bahrain. Meanwhile, members of GSG-9 were on alert and drafting their initial plans for a rescue option. Then on Sunday, October 16, the airliner suddenly took off, only 40 minutes before the first deadline for blowing it up. Initially, the aircraft was refused permission to land in Oman, so they flew for another three to four hours and arrived over Aden airport in South Yemen. The airstrips were blocked with armored vehicles, so the aircraft was forced to conduct an emergency landing in the sandy area between the two runways. Yemeni troops immediately surrounded the aircraft.

Conditions inside the aircraft were very unpredictable, with Akache having sporadic violent rages. After inspecting for any damage to the aircraft caused by the emergency landing, Jurgen Schumann, the pilot, was allowed to leave the plane to request fuel. Akache, fearing the pilot would give intelligence and information to the authorities, grew impatient as the pilot was gone for so long. Upon the pilot's return, Akache pointed his gun to Jurgen's head and executed him. The next morning the co-pilot, Jurgen Vietor, took off and flew the airplane to Mogadishu, the capital of Somalia. There, German government spokespersons contacted the hijackers and said they were prepared to release 11 terrorists held in jail and fly them to Mogadishu; Akache postponed his deadline to 0145 hours on the morning 18 October.

Negotiations continued throughout the day, and the crisis almost came to a resolution with the Yemenis offering to pay the ransom of U.S. \$15 million. Meanwhile, word got back to the GSG-9 command that Jurgen Schumann (the pilot), had been executed for no apparent reason. West Germany immediately took the hard line and ordered the GSG-9 leadership to go forward with a rescue operation to free the hostages in Aden.

At midnight, the sniper-observer teams moved into positions and began pinpointing the exact location of the terrorists through their thermal optical devices. At

0130 hours, the assault force gathered on the edge of the runway, ready to conduct their approach to the aircraft. During the movement forward towards the aircraft, the assault element realized that the lights on the airfield were silhouetting them, but luckily, they were not detected. Another minor inconvenience occurred once they got to the aircraft. The ladders they had used during their rehearsals were prepared for use on a Boeing 707 not a 737. The ladders were longer than required, so they had to lean them out farther at a 45-degree angle, causing them to slip. The team immediately pulled two members from the medical element to help hold the ladder in place (Bloomsbury, 1994, p. 140). Meanwhile, negotiations were ongoing in an effort to continue to buy time and maintain the terrorists inside the cockpit with the radios.

At 0205 hours, the order was given to begin the assault. Just as the plan called for, Somali troops lit a diversionary fire approximately 300m in front of the aircraft. The two hijackers, Akache and Wabil Harb went to the cockpit to determine what had caused the fire, whereupon the tower contacted them by radio and started to discuss the conditions of the exchange.

At 0207 hours, the assault element from the GSG-9 blew the emergency doors over the aircraft wings, throwing stun grenades inside. Other members of the assault force threw stun grenades over the cockpit to maintain the diversion and drew attention away from the team entering the aircraft. The terrorists were taken completely by surprise.

Akache was mortally wounded, but he managed to lob two hand grenades before his death. Luckily, both grenades rolled under the first-class seats, which cushioned the explosions without injuring anyone. Akache later died in the hospital and Wabil Harb died after being taken out of the aircraft. The female, Hind Alameh, was killed instantly by GSG-9 accurate fires. The second woman, Suhaileh Sayeh, was wounded and later recovered (p. 382). All passengers were exfiltrated through the rear of the aircraft with the sniper-observer elements providing overwatch-covering fires for protection. Four hostages were lightly wounded as well as one GSG-9 operator, but none was killed. The operation was completed in less than five minutes, and it was a total success.

2. Principles for Hostage Rescue Operations

a. Intelligence

GSG-9 utilized HUMINT and TECHINT means to prepare their assault. They determined early in the siege the number of terrorists inside the aircraft through signals given by the aircrew, such as numbers of newspapers requested or four cigarettes thrown in the trash tied together. Sniper-observer teams used thermal devices to pinpoint activity inside the aircraft, specifically the use of radios by the terrorists. Intelligence sources debriefed the pilot, while he was coordinating to get fuel for the aircraft. Finally, blueprints and a replica of the aircraft were used to prepare for the rescue.

b. Surprise

The four terrorists were taken completely by surprise, thanks to a well-coordinated and simple deception plan backed up by excellent operator's skills. The surreptitious movement to the aircraft and the silent ladder placement allowed the assault team to get in position unbeknownst to the terrorists just feet away. The explosive breach and the use of stun grenades completely disoriented the terrorists, giving the assault team the precious seconds required to dominate and eliminate the threat.

c. Operator's Skills

The operators from GSG-9 remained flexible throughout the numerous refueling stops and stages involved prior to the aircraft's final landing at Mogadishu. They adapted quickly to every situation, readjusting their plan to fit the scenario. They conducted numerous rehearsals on a similar aircraft, honing their skills in preparation for the assault. They also listened and welcomed the expert advice from two British SAS operatives throughout all phases of the operation. During the assault element's approach, sniper-observer teams properly guided the assault force's movement into the target area, looking for any signs that the terrorists were changing positions, or a possible compromise of the assault force. Finally, the GSG-9's actions on the objective were executed violently and with precision fires, neutralizing the threat before it could engage any of the hostages or the rescue personnel.

d. Deception

The use of a simple deception plan at the front of the aircraft, in this case a fire, provided a critical diversion to cover the final approach to the target. The

combination of radio communications to maintain the threat in the cockpit of the aircraft, in combination with the use of stun grenades and the fire, created just enough of a diversion to allow the assault team the element of surprise.

2. Biorhythm

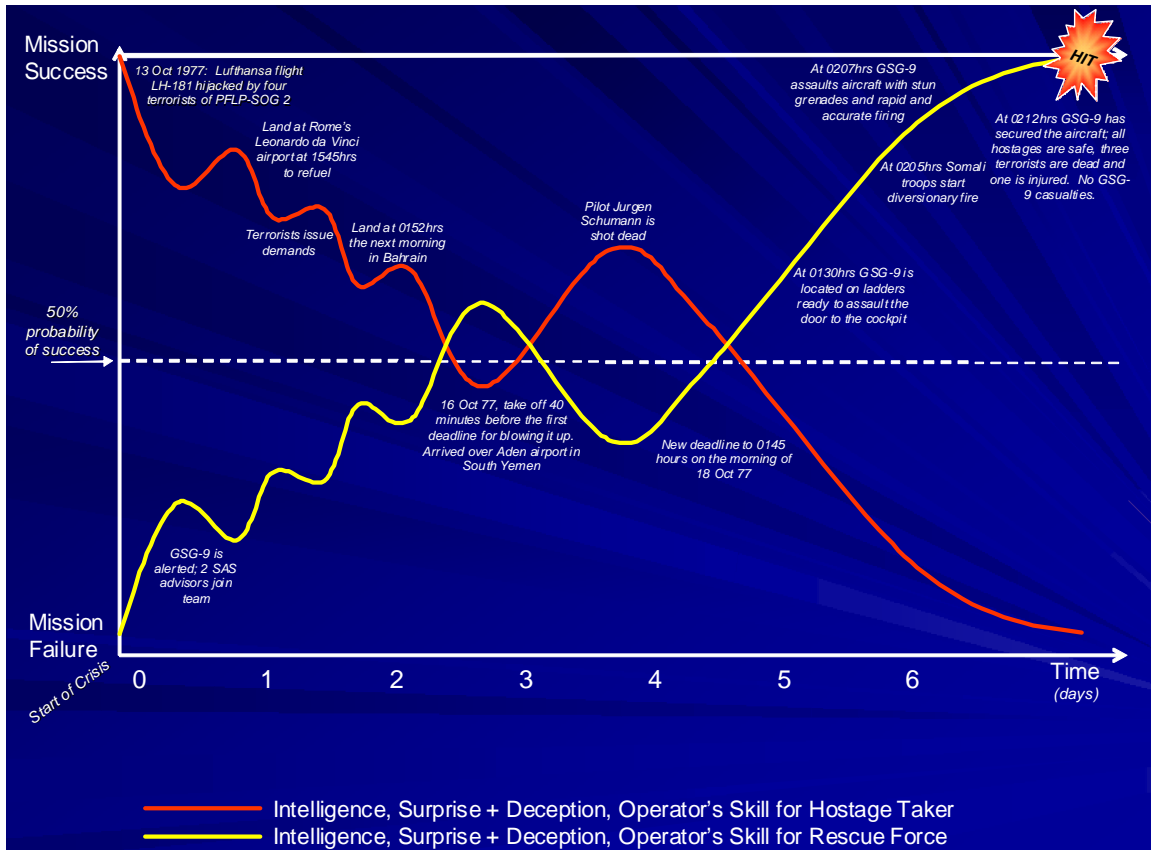


Figure 45. Author's Representation of Operation FIRE MAGIC's Biorhythm

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X. CONCLUSIONS

A. HOSTAGE RESCUE IN GWOT

During the last thirty years international hostage taking has transformed itself from an era of hijackings in the early 1970's, to the rise of Islamic extremism in the 1980's with embassy sieges, to the 1990's with the advent of narco-terrorism. Today, and during the most recent war in Iraq—Operation IRAQI FREEDOM—radical terrorist organizations are using hostage taking as the coercive weapon of choice, trying to level the playing field against coalition forces. Terrorists are kidnapping civilian workers and soldiers alike, beheading them for the world to see on national television. Their demands are simple—stop supporting the war and leave Iraq. Their intent is to persuade countries supporting coalition forces to leave Iraq and destroy national will. In Game Theory terms, it is a game of chicken against an opponent that parks his vehicle in the middle of the road and walks away. Only when the hostage taker's location is known, can we apply the waiting game and track the biorhythm model. Otherwise, it is a race against time to try to find the hostage/s before they are executed. To counter this tactic, counterterrorist forces must rely heavily on a robust intelligence network that can provide actionable intelligence, pin pointing the exact location of the hostage takers, and destroy them immediately. Simultaneously, diplomatic and informational levels of national power should focus on a theme that seems to devalue the hostage, preventing the “theater of terror” effect from rising, while at the same time allowing the military arm to pursue these terrorists aggressively. Giving in to terrorist demands encourages more acts of terror, strengthens the terrorist's agenda, and reinforces that their strategy works.

B. IMPLICATIONS FOR THE FUTURE

Hostage rescue forces should be employed only after the careful implementation of the hostage rescue principles and the close monitoring of the hostage crisis biorhythm. Maintaining the pulse of the crisis through the biorhythm model will allow commanders at the strategic, operational, and tactical levels to decide the best execution time, exploiting the enemy's culmination points. This implies having patience in the negotiations process and trusting the intelligence apparatus to do its job.

Although it might seem that an early attack on a terrorist organization before it settles into a routine is the most suitable option, early execution of a rescue operation is not often feasible. Executing the operation early does not allow for the natural degradation inside the target—a fundamental aspect to ensure surprise for the rescue element (Nordberg, 1999, p. 15). Waiting permits the situation to develop and it allows for the negotiations process to take effect, intelligence to be gathered, and for the rescue force to prepare a skillful recovery plan.

Alert sequences for counterterrorist forces must take into consideration the benefits of waiting for later execution. Timelines that set the battle rhythm for these forces must reflect and focus on preserving operator's skills, and not allow for the natural degradation of the force as the siege continues. Spinning up and alerting CT forces to prepare an emergency plan of action en route to the target when the situation has not been developed will only tire and degrade the quality of the force. These forces are already at a peak state of readiness; the focus during the initial stages of the siege should be on getting the intelligence apparatus into action to exploit the target. This will lay the foundation for a good deception plan, which will in turn give the operators their much-needed element of surprise. Only then should the CT force be readied to initiate their battle rhythm.

Prolonging the siege can also set the stage for an explosive confrontation between the hostage takers and their victims. Therefore, the art of solving the crisis rests on the skillful manipulation of the negotiations process to buy time, through a synergistic approach encompassing all the instruments of national power to influence the siege. Simultaneously, the rescue option must be considered immediately following the four proposed principles—*intelligence*, *surprise*, *operator's skill*, and *deception*. Unless a trigger is met early in the crisis, the rescue must wait. However, the waiting game must focus on finding the best windows of opportunities to send in the rescue force.

C. RECOMMENDATIONS

This thesis developed a theory to determine the best execution time to conduct a hostage rescue attempt, by explaining the phenomenon of a hostage crisis *biorhythm* and proposing four hostage rescue principles essential for success—*surprise*, *intelligence*, *operator's skill*, and *deception*. The analysis conducted in this thesis must be

implemented in all counterterrorist organizations, specifically those that deal with hostage rescue operations. The findings in this thesis enable decision-makers at the strategic, operational, and tactical levels to better plan and organize hostage rescue forces to respond striking at the enemy's centers of gravity and exploiting culmination points. Additionally, this thesis enables decision-makers to comprehend the hostage crisis environment by providing a hostage rescue planning model that can be implemented in any counterterrorist joint task force to give a clear picture of possible outcomes throughout a hostage crisis.

Strategic special operations such as hostage rescues require the surgical precision of an expert counterterrorist unit. The highest levels of government must maintain the pulse throughout the planning, preparation, and execution of such operations. CT forces must be used when the opportunity comes, fully understanding the risks and benefits of unleashing such units on the enemy. The operational art of using a counterterrorist force must encompass a thorough understanding of the four principles presented in this thesis. In a hostage crisis, engaging a terrorist threat with extreme prejudice whenever negotiations fail will send the correct message to the terrorist organization.

A hostage siege is a dramatic event, highly visible and effective in getting international attention; the terrorists will continue to use this tactic to achieve leverage. U.S. national policy and commitment to recovering hostages must be steadfast; bargaining or yielding to terrorist demands only increases the likelihood of more hostages taken. No matter how much money is spent, or how well trained our hostage rescue forces are, we still have innocent people killed because of operations "gone wrong" (Pittman, 2003, p. 1). On the other hand, brilliant operations such as CHAVIN DE HUANTAR reinforce the fact that surgical hostage rescue operations do work. The U.S. has the best counterterrorist forces in the world. We spend billions of dollars outfitting and preparing them to do a job nobody wants to take responsibility for, and then expect no political blowback. We must let the professionals do what they do best. The U.S. counterterrorism strategy in the GWOT should encourage the use of CT forces aggressively against any hostage taker; a faint-hearted policy based on previous failures and risk aversion will not bring our hostages home.

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APPENDIX: HOSTAGE LIST, OPERATION CHAVIN DE HUANTAR

A. MINISTERS

1. Francisco Tudela (Foreign Relations)
2. Rodolfo Muñante (Agriculture)

B. AMBASSADORS

3. Morihisa Aoki (Japan)
4. Jorge Gumucio (Bolivia)

C. CONGRESS PERSONNEL

5. Samuel Matsuda (Decentralization Commission)
6. Eduardo Pando (Mining Commission)
7. Carlos Blanco (Budget Commission)
8. Luis Chang (Economics Commission)
9. Gilberto Siura (Defense and Internal Order Commission)

D. MAGISTRATES

10. Moisés Pantoja, Chief Justice of the Supreme Court.
11. Hugo Sivina.
12. Alipio Montes de Oca.
13. Mario Urrelo.
14. Carlos Giusti (Died as result of injuries sustained during the rescue).
15. Luis Serpa.

E. STATE REPRESENTATIVES

16. Ricardo Kamiya, General Secretary to the President of the Republic.
17. Carlos Tsuboyana, President's Vice-Minister.
18. Juan Mendoza, Mining Vice-Minister.
19. Felipe Ramírez, Representative to the President's Ministry.

20. Salvador Romero, Secretary for the Ministry of Mining and Energy.

F. POLICE AND MILITARY

21. Vice Admiral (ret.) Luis Giampietri, President of the Peruvian Institute of the Sea (Instituto del Mar Peruano) (Imarpe).

22. General Máximo Rivera, Commander of DINCOTE (National Directorate Against Terrorism).

23. General Alfonso Villanueva, Commander of the PNP Intelligence Department.

24. Guillermo Bobio, Chief of State Security.

25. Navy Captain Alberto Heredia.

26. Army Lieutenant Colonel Roberto Fernández.

27. Army General Arturo López Pardo.

28. Air Force Colonel Julio Rivera.

29. Air Force Colonel Orlando Denegri.

30. PNP General Carlos Domínguez.

31. PNP General Hugo Darío Vega.

32. General Julio Pinto, PNP Secretary for the Superior Direction.

33. General Hugo Vera, PNP Economics Director.

34. PNP Colonel Alberto Castillo

35. PNP Colonel Jorge Villacorta.

36. PNP Colonel Jaime Valencia, Chief of Kidnapping Division

37. PNP Colonel, Marco Miyashiro, former CDR of DINCOTE.

38. PNP Colonel Rómulo Zevallos.

39. PNP Colonel Jorge Negrete.

40. PNP Colonel Rowel Rivas.

41. PNP Lieutenant Colonel Gerardo Haro.

42. PNP Major Oscar Pajares.

G. VERY IMPORTANT PERSONS

43. Pedro Fujimori, President Fujimori's brother.

44. Pedro Haritomi.

45. Juan Julio Wicht, Priest and Economics Professor at the Pacific University

46. Miguel Takahasi, consultant for the *PesaPerú* corporation.

47. José Ishiki, accountant for the *Cogrono* food corporation.

48. Juan Gibu.

49. Tokeshi Gusukuda, investigator for the Center of Growth Promotion.

50. Pedro Inomoto.

51. Francisco Salinas.

52. Alfonso Yamakawua.

53. Jaime Bisso, general manager for the *North Regional Bank Banco (Regional del Norte)*.

54. Mauricio Molina.

H. JAPANESE BUSINESSMEN

55. Shiguero Taki, *Panasonic* General Director.

56. Kosabe Shoji, *Noys* engineer.

57. Masao Nakashi.

58. Jorge Hasawara, *Ajinomoto* executive.

I. EMBASSY PERSONNEL

59. Kazumi Ono.

60. Sinichi Takeda.

61. Shigeru Yamakasi.

62. Fumio Sunami, First Secretary.

63. Hajime Nakae, First Secretary.
64. Shinji Yakamoto, Cultural Attaché.
65. Ghiroyuki Kimoto, Ministry Counselor.
66. Hirio Nakamura, Second Secretary.
67. Nasahiro Nakai, First Secretary.
68. Hiroto Morozumi, Second Secretary.
69. Hirofumi Sueyoshi, worker.
70. Hidekata Ogura, First Secretary.
71. Katsumi Itagaki, Second Secretary.
72. Tsutomu Takai, Consul.

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